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The Man Who Talks to Plants

Clair de Terre

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First meeting with José Carmen

Wasn't this an extraordinary opportunity to overcome world hunger? Reduced operating costs, no contamination of soil or water... Perhaps this was the ecological solution we had all been hoping for...

After travelling throughout Latin America in search of the secrets of traditional medicine, I had come to believe that my capacity for amazement at the practices of the world of healers had reached its limits. Until the day I met Don José Carmen...

In 1979, I was filming in Mexico for French television the last episode of a series of three documentaries devoted to traditional medicine in Latin America, entitled *La Médecine vieille comme le monde (Medicine as Old as the World)*. One of my first contacts was Gaudencio, an Indian

of Tlaxcalan origin. Dr. Rafaël Eslrada Villa, director of the Wilhelm Reich Institute, introduced him to me as follows: "I have never known anyone with hands as warm as Gaudencio's. He was my assistant for a while, but he lost his powers. Nevertheless, you should talk to him, he could help with the research."

Gaudencio was short in stature. He had dark skin and oriental features. I explained the reasons for my stay in Mexico and, almost without transition, asked him when he had become aware of his gifts.

- I had a vision when I was two years old, he replied. A very beautiful woman appeared to me. The most striking thing about her were her eyes, bright and tender. She floated above me for a moment, then drifted away and disappeared through the door. I followed her, and I remember perfectly well that I had a tremendous erection!
- At two years old?
- You can believe me. I also remember my aunts shouting:

[&]quot;Look out, the child is leaving!"

- Since that day, this woman has often appeared to me. All I had to do was think of her and she was there... Later, I don't know how, people realised that I could heal them. I was taken to sick people, and my mere presence brought them relief. Sometimes, just laying my hands on them made their ailments disappear. I grew up with this power and built a reputation as a healer. In recent years, I started charging for my services and earned a lot of money. I even managed to extract money from people to relieve the souls of patients... And today, it has been nine months since she last appeared to me. I don't mind not being able to heal anymore. What hurts me is not seeing her again.

Gaudencio had a distant look in his eyes.

- "You love that woman," I said.
- She's not a woman, she's a vision, he replied curtly.
- "Maybe, but you're in love..."
- I'm telling you, I miss her, he muttered, almost angrily, only because she was my guide.
- Listen, I said, touched by her emotion, if you love her as I believe you do, seeing your eyes

light up when you talk about her, you will see her again. True love always triumphs!

Gaudencio looked at me, first with surprise, then with gratitude. He put his hand on my shoulder and, for the first time, his voice became friendly.

- Your words did me good, he said. I'll help you with your work too. I have a farmer friend north of Mexico City, near Guanajuato. He grows giant plants, cauliflowers bigger than your arms outstretched, onions the size of your head, corn six metres tall and lots of other things! And do you know how he does it? By talking to the plants! He said these last words solemnly. To convince me better, no doubt. I thought it had nothing to do with my film on traditional Mexican medicine, but as it promised to be fascinating anyway, I accepted his proposal.
- When can we see him?
- Next week, once we've let him know we're coming.

That moment marked the beginning

of an incredible adventure that would give me the opportunity to believe more than ever in the unsuspected nature of our planet's resources, leading me to make a film about this farmer and write a book

Five days later, the train took us to Guanajuato, where we boarded a bus that dropped us off in the Santiago Valley. This region, covering an area of approximately 835 square kilometres and located at an altitude of 1,723 metres, is the scene of a prodigious phenomenon. According to the Aztec calendar, every 1,040 years, the stars that form the Big Dipper align above seven extinct volcanoes which, by some inexplicable coincidence, follow the constellation's path exactly. This is also where the nickname "Seven Luminaries" comes from, given to Valle de Santiago, the main town in the region.

This large village, lost in the mountains, surprised me with its liveliness. Its small, welcoming square, lined with trees to protect the Santiaguinos from the sun, its colonial arcades and the imposing presence of a magnificent church immediately strike the visitor on arrival.

I would soon discover that, in this region located almost at the centre of Mexico, the

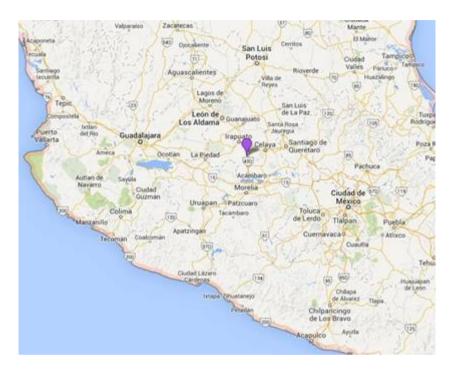
relationships between man, the earth and the cosmos seem to merge.

Long ago, Valle de Santiago was called *Camembaro*. This beautiful city was also known as *Val de las Altantisas*, which means "valley of medicinal plants". It was the stronghold of the Purupecha and Chichhneca peoples, whose culture permeated the region. Legend has it that the seven tribes that populated Mesoamerica emerged from a cave leading to wisdom, located in the centre of the Culiacán volcano.

Gaudencio took me to the edge of town. In a dirt alley, he stopped in front of a black door that looked like a garage entrance. We knocked until a teenage girl opened the door. She must have been thirteen years old. Her beautiful, long hair fell delicately over her shoulders. She greeted Gaudencio warmly and invited us in. She was Don José Carmen's eldest daughter. Later, she confided her secret to me: her hair had never been washed with shampoo; she washed it with a simple chamomile infusion.

Mesoamerica is the territory occupied by the high civilisations pre-Columbian:

Mexico, Guatemala, Honduras, Nicaragua and Costa Rica.



Valle de Santiago, almost in the centre of Mexico

Don José Carmen's spacious patio was home to a few trees and a large table surrounded by handmade chairs. My attention was particularly drawn to a lemon tree whose generous fruits glistened in the sun and one of whose branches stood out from the others, stretched over the table as if to provide fruit and shade. Finally, Don José Carmen appeared: copper-skinned, a sturdy man in his fifties under his white straw hat, with a good-natured look that was both wary and mischievous. The way he dressed showed his lack of interest in the matter.

Gaudencio told him about my work on traditional medicine practised by healers. He seemed enthusiastic and asked us to be his guests.

That same afternoon, during lunch, as Don José Carmen picked a lemon from the branch that leaned over the table, I sensed an incredible connection between him and the plants. However, I later noticed that whenever I brought up the subject of "giant plants", he seemed uncomfortable and had difficulty breathing. I would then change the subject, and he would regain his cheerful serenity.

The days passed and he still hadn't decided to show me his crops. So I gradually resigned myself to the idea of leaving without seeing his giant plants, my incurable shyness preventing me from broaching a subject that clearly seemed to trouble him. A few days before my departure, as we were returning from the college where we had accompanied his daughter, he said to me point-blank:

- You must think I'm jealously guarding a secret, as some of my neighbours do, who also imagine that I've made a pact with the devil or something like that!

He took a deep breath, as if to free himself from a pulse that was oppressing him.

- Well, no, I'm not hiding anything! If it doesn't work for them, it's because they don't believe in it! I helped them, though, I even planted on their land myself...

He became animated, indignant at the disbelief and envy his giant vegetables aroused.

José Carmen - For example, if you're not thirsty, I'm not going to give you water! Well, it's the same with plants! If they're not thirsty, I don't water them.

Yvo - But how do you know when they're thirsty?



Emblem of the Seven Luminaries of Valle de Santiago

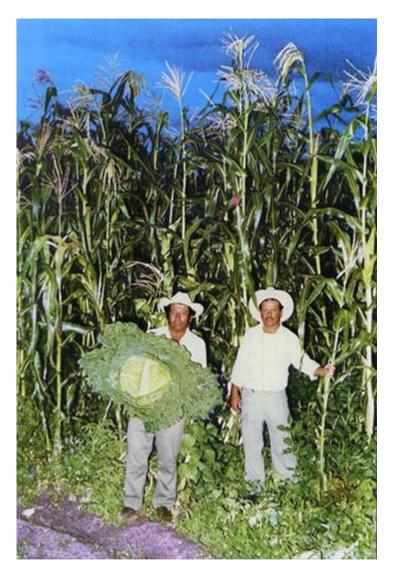
J.C.- By looking at them. Sometimes, during the night, I feel that they need water and that I have to get up and go to the field to water them.

Yvo - So you believe that plants have a form of intelligence that allows them to communicate with humans?

J.C. - Of course! Like any animal, any person, and even any thing!

At that point, I was perplexed! I knew that animist Indians believe that everything has a soul: beings, trees, mountains, rivers and even objects. Listening to Don José Carmen, I remembered certain healers I had met during my research. Initiated into the ancient secrets of the plant world, almost all of them had told me that it was not only the active ingredients of the plant that healed, but the plant itself, or rather the spirit of the plant.

From that day on, a real friendship developed between Don José Carmen and me, and he finally decided to take me to see his famous crops.



Don José Carmen (right) in his cornfield

As we left the peaceful little town, an incredible sight awaited me. We had barely passed the last houses and walked along a disused railway line when he pointed out his field to me. Compared to his plants, the neighbouring cornfields looked stunted. On this land, which seemed to exude a special vitality, grew the greenest and most luxuriant crops I had ever seen. When I asked him about it, he replied that unfortunately he only owned three hectares and for that reason could not expand his experiments as he would have liked.

Yvo - Have the engineers from the Ministry of Agriculture seen your crops?

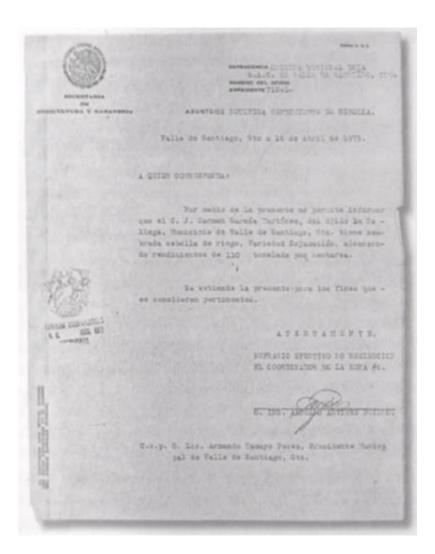
José Carmen - Yes. Many agricultural engineers came to visit. They analysed the water, vegetables, seeds and, above all, the soil, which they believed to be the source of these exceptional results. They found nothing. Although the neighbouring fields are composed of the same volcanic soil, the plants there do not exceed normal size. They challenged me to repeat the experiment in other states. They took me to Veracruz, San Luis Potosí and Tamaulipas. And each time, I showed them that I could achieve the same results anywhere

where. In Tamaulipas, for example, we harvested seven tonnes of maize per hectare. That's not much, but compared to our neighbours, who only harvest one and a half tonnes, it's not bad! Another time, agricultural engineers gave me an official document certifying that I had obtained a yield of 110 tonnes of onions per hectare. That's great! What am I going to do with this document?

We walked along the maize plantation. He walked carefully along the furrows so as not to crush any grass, examining the leaves covering the ears of maize closely.

Yvo - How has your production evolved?

José Carmen - My maize production has increased, of course, but I'm not yet satisfied with the results. I'm trying to increase the yield per ear, which I haven't managed to do yet. But I feel I'm close to achieving my goal. I know the plant is happy because it's growing more vigorously. All it needs to do now is produce more ears. The height of the plant is not important. It just means that it is happy and that we are on the right track... He was talking to himself in front of plants nearly six feet tall.



SECRETARIAT FOR AGRICULTURE AND LIVESTOCK Notification of onion yield

To whom it may concern:

I hereby certify that C. J. Carmen Garcia Martinez, from the town of La Gallega, municipality of Valle de Santiago, Guanajuato, sowed irrigated onions of the Cojumatlan variety and obtained a yield of 110 tonnes per hectare.

metres high with enormous grains, which still did not satisfy him! On the way back, I was plagued by confused thoughts. I regretted not bringing the film crew with me, but I also thought that the equipment and technicians might have intimidated José Carmen and that we might not have been able to establish the same quality of communication. As we walked through the beautiful park in Santiago, I decided to ask him if he used any fertiliser.

J.C. - Some time before the harvest, I sow a small herb between the plants. After the harvest, the soil is turned over with this herb. This gives me a natural fertiliser. The soil is a living thing, it needs to be nourished with living, organic matter. Fascinated by what I had seen and the revelations he

confided in me, I had put the film on traditional medicine on the back burner, while my entire team was waiting for me in the capital to continue filming. On reflection, I realised that this discovery was the most important thing I had ever experienced. The agricultural revolution that could result from it seemed more important than anything else.

Wasn't this an extraordinary opportunity to end world hunger? Lower operating costs, no contamination of the soil or water... Perhaps this was the ecological solution we had all been hoping for... Perhaps I would be able to incorporate all this into the film in some way, I didn't know yet. But what I was sure of was that I would return to Valle de Santiago.

Back in Mexico City, I rejoined my film crew. I told the sound engineer and cameraman what I had just seen. At first they were sceptical, but they quickly became enthusiastic. However, appointments with healers in the south of the country took us away from Don José Carmen for a while. The subject was serious. We were aware of the catastrophic data relating to the pollution in the world and the

difficulties faced by environmental movements left us feeling helpless.

Later, encouraged by my producer Florence Belfond, a vegetarian and deeply committed environmentalist, I conducted an investigation into the environment and the worrying state of our planet. Of course, everyone is aware of the problem, but few people know exactly how serious the threats to us are.

That is why this book is intended to be both a message of hope, illustrated by the different approach taken by Don José Carmen, and a source of information on the harmful consequences of industrial society on our environment.

Encounters with our environment

Before assessing the ecological state of the planet and in order to better understand the techniques used by Don José Carmen, I believe it is necessary to give a very brief overview of plant life.

ESSENTIAL NUTRIENTS FOR PLANTS

In order to grow, plants draw the elements necessary for their constitution from their environment (atmosphere, water and soil).

Analysis shows that the organic matter in plants is mainly composed of nine substances (called plastic elements) that contribute to the formation of tissues and represent 99% of their mass. Other substances, called trace elements, are also present, but in minute quantities.

Average composition of plants

Plastic elements

Carbon	(C)	42
Oxygen	(O)	44%
Hydrogen	(H)	6%
Nitrogen	(N)	2%
Phosphorus	(P)	0.4%
Potassium	(K)	2.5%
Calcium	(Ca)	1.3%
Magnesium	(Mg)	0.4%
Sulphur	(S)	0.4%

Trace elements

The main ones are iron, manganese, boron, copper, molybdenum and chlorine. Others include sodium, aluminium, vanadium, silicon, cobalt, fluorine and selenium

Sources of plant nutrients

Plants draw carbon and oxygen from the air in the form of carbon dioxide (CO2), which they convert into carbohydrates through photosynthesis and chlorophyll assimilation. They can also find some of the sulphur they need in the form of sulphur dioxide (SO2).

essential.

In the soil, most green plants capture the nitrogen they need in mineral form. Legumes, on the other hand, obtain it thanks to bacteria located inside their root nodules. Minerals (phosphorus, potassium, calcium, magnesium, as well as most of the sulphur and trace elements) come from the soil, where the roots absorb them in very diluted solutions.

The water absorbed by the soil is essential for the plant's many functions and also provides it with the hydrogen and oxygen it needs.

This brief presentation will help you better understand the benefits of the revolutionary formulas used by Don José Carmen, which I will discuss further below.

THOUGHTS ON THE USE OF NITROGEN-CONTAINING FERTILISERS

In 1905, Fritz Haber discovered a process for synthesising ammonia from atmospheric nitrogen. This technique was used by manufacturers to produce explosives. At the end of the Second World War, heavy industries, particularly the arms industry, sought new applications for their ammonia stocks. They then converted to fertilisers!

Why take an interest in a field that seems so far removed? Because plants need nitrogen to grow, and 99% of chemical nitrogen production is based on ammonia synthesis. In order to obtain abundant harvests, "conventional" agriculture has therefore made extensive use of chemical nitrogen, an inert substance initially synthesised for lethal purposes...

Plants—and bacteria in the soil, as well as microscopic fungi—convert ammonia into labile nitrites, then into nitrates. Nitrates can accumulate in plants to alarming levels. Pollution of the environment...

The pollution caused by nitrates is now a cause for concern among specialists: two-thirds of it comes from agriculture. Nitrates affect human life: 5% of these substances are converted in the body into nitrites, which convert *the haemoglobin* in red blood cells into methaemoglobin, which is unable to carry oxygen from the lungs to the tissues. This causes cyanosis, which can be fatal for newborns. The phenomenon also leads to cancer and hereditary degeneration. These nitrates are also factors in soil acidification, which makes aluminium soluble, i.e. toxic to those who ingest it through vegetables or water, especially if their kidneys are not functioning properly.

Over time, aluminium will concentrate in vital organs, mainly in the brain, spinal cord, myocardium, liver cells, bones and parathyroid glands. Chemical fertilisers derived from nitrogen are dead substances that reduce the vitality of the topsoil, unlike the humus that was used in the past.

In the logic of intensive agriculture, on soil treated in a 'conventional' manner, it is necessary to increase the amount of chemical fertilisers used to boost yields. This, of course, contributes to further impoverishing the soil and gradually killing its living organisms. Once set in motion, this vicious cycle accelerates. These plants, 'born of death', cannot be of good quality. They provide 'empty' calories and very little vital energy, the subtle force of life. Victims of what are known as the 'ills of our civilisation', humans are gradually becoming devitalised. Thus, the use of ammonia, via the chemical nitrogen used in synthetic fertilisers in intensive agriculture, insidiously attacks the blood and nervous systems.

The fertiliser industry

The use of intensive of fertilisers in agriculture can be quantified. In 1989 alone, the global of of industrial fertilisers was 145 million tonnes, representing a European average of 300 to 700 kg of fertilisers per hectare, resulting in financial waste and massive contamination... (Don José Carmen, on the other hand, only needs one kilogram of his formula to fertilise one and a half hectares!) A part of intermediary (ammonia, phosphates, phosphoric acids and

sulfuric acids, urea, ammonium nitrate) are used in many industries (glues, resins, synthetic fibres, explosives for nitrogen products, detergents for sulfuric acid, etc.). In France, these industrial products containing nitrogen and phosphates represent only 12% of production, the bulk being used for the "soil fertilisation"!

The nitrogen industry in France

As we have seen, this industry relies on the use of ammonia. Apart from a small amount of natural ammonium sulphate produced by the mining and steel industries, almost all nitrogen fertilisers are derived from synthetic ammonia. In 1994, the French industry produced nearly 2 million tonnes of nitrogen.

GLOBALISATION OF THE ECOLOGICAL CRISIS

Here are a few examples, among many others, to illustrate this phenomenon, which is affecting the vital functions of the earth, water and air throughout the world.

China is seriously threatened by the very high level of contamination in its rivers, lakes and water reservoirs. Without access to drinking water, 65% of Chinese people suffer from ailments or even diseases caused by water pollution.

The air in large cities is up to ten times more polluted than the levels tolerated by the WHO. The main cause is the millions of tonnes of coal burned there annually. The problem is so serious that there is no hope of finding a solution within the next ten years!

At the *Globe 90* conference in Vancouver, the director of the Russian Committee for Environmental Protection stated that one in five illnesses in Moscow was caused by air pollution.

Bulgaria, which Stalin intended to become the

the USSR's leading agricultural supplier, began to industrialise in the 1960s. Today, it exports two-thirds of its agricultural production and is forced to import food. Considered a state secret at the time, its industrialisation led to widespread contamination, the effects of which are only now beginning to be seen... The Communist Party has acknowledged that 60% of the land has been – and continues to be – sterilised due to industrial waste and the excessive use of fertilisers and pesticides.

And what about the legacy of General Pinochet in Chile, who prided himself on having achieved spectacular economic results: after sixteen years of dictatorship, Chile, which had virtually no fishing industry, now ranks fourth in the world. But at what cost? Fishing companies (Japanese, Norwegian, Spanish and American) have plundered the coasts and left behind huge amounts of waste. Over the last ten years, Chilean fish consumption has fallen from 6.3 to 4.4 kg per person. The country has also seen rampant deforestation. The rate of deforestation is higher than in the Amazon. It

is mainly carried out by Japanese companies, now internationally recognised as "ecoterrorists". The Japanese are destroying the environment all over the world, except in their own country...

Finally, with its 12,000 diesel buses, Santiago, Chile ranks third among the world's most polluted cities (the first being, by far, Mexico City) ¹.

The adverse effects of industrial agriculture

Intensive farming in the plains and climatically favourable regions of Europe yields very high returns. But it is precisely this type of agriculture, which uses pesticides and fertilisers, that is responsible for the most pollution. The regions most affected are the Paris Basin, parts of Denmark, northern Germany, eastern England and the Po Valley in Italy. Furthermore, the high cost of European agricultural policy does sufficient income for farmers guarantee and seriously threatens rural communities. consequence of the expansion of intensive farming is directly linked to the increase in the volume of fertilisers obtained from synthetic nitrogen

used in the European Community, where production rose from 3 million tonnes in 1960 to 9 million tonnes in 1991.²

Nitrates in water above tolerable levels

The natural amount of nitrates in groundwater is less than 5 milligrams per litre. However, studies show that in some countries, such as Denmark, 8% of sources contain more than 50 milligrams of nitrates per litre, the official limit set by the European Community.

Between 1990 and 1995, France saw a rapid increase in nitrate levels in its waters, exceeding the 50 milligrams per litre threshold. This phenomenon affects the water resources of 20% of the population.

In West Germany, the situation is the same: 5-6% of the population is affected.

In the Netherlands, estimates predict that 25% of groundwater will exceed the maximum nitrate level in the coming years. In many parts of eastern, central and southern England, it is likely that quantities of nitrates will exceed 100

milligrams per litre.

Spanish regions with high levels of irrigation and areas of intensive agriculture in the Po Valley in Italy appear to be facing the same fate.³

In Denmark, the Ministry of Agriculture has calculated that of the 805,000 tonnes of nitrogen used each year, only 360,000 tonnes end up in crops, with the remaining 445,000 tonnes being lost to the environment.⁴

In all European Community countries, underground rivers have been contaminated by nitrogen and in some places contain nitrite levels of up to 200 milligrams per litre. Countless wells have had to be closed as a result.

Pesticide consumption in the European Community

The Member States of the European Economic Community use more than 314 million tonnes of pesticides each year, making them the largest consumers of pesticides in the world.

Pesticides in tap water

In 1988, a study by Riven/Riza⁵ carried out on 300 representative waterworks in West Germany revealed that untreated water, as well as drinking water from 172 of them, contained pesticides and that, in 27% of cases, the waterworks had exceeded the limit set by the EEC. The most commonly found pesticide was atrazine. Up to 26 milligrams per litre were found, which is 260 times the limit set by the EEC.

In light of these data, the study concludes that the situation is more serious than might be thought. Indeed, current methods of analysis can only detect about half of the active ingredients contained in pesticides. As for monitoring programmes, they are limited or even non-existent in many countries. The problem is further complicated by the fact that it can take ten to twenty years for pollutants in the soil to reach the water table.

In short, current agricultural practices, which already affect our daily lives, are seriously jeopardising the future of Europe's water reserves.

Pesticides in the sea

What happens to the millions of tonnes of pesticides sprayed on crops in the EEC every year? The answer to this question can be found in comprehensive studies that list the pesticides found in the North Sea... It is endless: atrazine, simazine, propazine, parathion-methyl and ethyl, permethrin, dichlorobenil, lindane, chlorophenols, etrimfos and fenitrothion.(6) The effects of these products on marine life are unpredictable.

What happens on the surface of the sea is a typical example. This is where synthetic products accumulate, including the pesticide tributyltin.⁷ Other studies have revealed abnormalities in the development of certain fish embryos in the polluted waters of the North Sea.⁸ In the German Bight, up to 50% of pollock embryos are deformed...

Atmospheric pollution

In addition to the ecological disasters we have just described, the intensification of agricultural production has led to a significant increase in certain gases, including methane, ammonia and nitrous oxide. This is dramatic, given that methane and nitrous oxide contribute to global warming, nitrous oxide (N2O) depletes the ozone layer and ammonia contributes to acid rain.

Methane

The concentration of methane, a powerful greenhouse gas, in the atmosphere is increasing.⁹ Agriculture generates around 45% of total global methane emissions.

Acid rain

Industrial agriculture plays a significant role in the suffocation and death of forests. Increased levels of ammonia evaporating from mineral and animal fertilisers (particularly manure) contribute to the formation of acid rain. Research shows that 20% of acid deposits are caused by ammonia evaporation. Today, one in three spruce trees suffers from defoliation due to acid rain.(10)

Pesticides in the air

Quantitative data on the volume of pesticides released into the atmosphere are scarce. However, tests show that 75 to 90% of toxic substances sprayed on crops evaporate. Far from the crops from which they originate, these pesticides travel long distances through the atmosphere, polluting the air, fog and rain.(11) Organochlorine derivatives have been detected in the air near the Arctic and Antarctic.12 The German Chemical Society has calculated that 1.8 tonnes of atrazine fell with the rain on German territory.

Pesticides such as methyl bromide and carbon tetrachloride destroy the ozone layer that protects the Earth from ultraviolet rays. It is estimated that methyl bromide, widely used in fumigation, is responsible for about 20% of this destruction. In addition, methyl bromide is thirty times more harmful than CFCs (chlorofluorocarbons), which are considered one of the main agents of ozone layer destruction...(13)

Energy consumption

The high consumption of fossil fuels - coal or oil - clearly shows that industrial agriculture must be urgently replaced by other, more environmentally friendly forms of agriculture. Indeed, if we want to double global food production within six years, thanks to technologies convention de la

"green revolution" (based on chemical nitrates and irrigation), energy consumption will have to quadruple.

A Mexican farmer who works the land with virtually no machinery would be proportionally four times more productive than the agri-food sector in the major grain-producing regions of the United States.¹⁴ This is because the profitability of human labour compared to machines continues to increase as the agri-food industry requires more and more machinery and fuel. The agri-food industry is not only inefficient, it is also a bottomless pit. ¹⁵

Consider this: the agri-food sector as a whole consumes 10 to 20% of the energy used in OECD countries. ¹⁶ In the case of agricultural exporting countries such as France, the proportion exceeds 20%!

The dangers of pesticide production

In January 1992, an explosion at an organophosphate pesticide factory in Greece caused serious emissions of toxic substances. It is estimated that 200 kg of dimethoate were released into the atmosphere. Many people, especially children, were treated for symptoms characteristic of pesticide contamination.

Bhopal...

Is a terrible name, synonymous with the toxicity of chemical pesticides. On the night of 3 December 1984, gas leaks were detected at the pesticide factory of Union Carbide, an American company based in Bhopal, in the Indian state of Madhya Pradesh. The following morning, more than a thousand people were found dead in the neighbourhoods near the factory. A deadly gas, methyl isocyanate, contained in the tanks, had turned the city into a veritable gas chamber; 200,000 people were poisoned. Years later, there were still 500 deaths per year. To date, it is the plus major industrial catastrophe most in

history.

Agrochemical residues in food

The concern of the public focuses mainly on the daily consumption of chemical residues contained in food and water. Most crops are currently treated several times with pesticides, both during the growing season and after harvest. The effects of pesticides ingested in small quantities in food have only recently been discovered. The limited information available is worrying. In small doses, they may not cause an acute toxic reaction, but regular absorption may seriously affect health. The London Food Commission has found that 49 pesticides commonly used in the United Kingdom are carcinogenic.(17) The US Environmental Protection Agency has assessed the carcinogenic potential of 129 chemical pesticides:

83 of them pose definite, probable or possible risks, depending on the case.¹⁸ The National Programme of Toxicology reports that long-term use of contaminated groundwater threatens the immune system.¹⁹

Pesticides in breast milk

In front of the Parliament in Strasbourg, two MEPs denounced the results of breast milk analyses carried out in many European countries. The level of toxicity was so high that, in some cases, such milk could not be sold on the market because it would not pass the health checks required by current legislation. These MEPs called for studies to establish possible a correlation between breast milk contamination and cancer mortality rates. They published the results of human milk analyses which revealed the DDT. dieltrin and of presence organochlorine insecticides in quantities four to five times higher than the permitted levels. The concentration of organochlorine pesticides such as DDT in breast milk caused such concern in some parts of Europe that it was officially advised not to breastfeed babies beyond six months, as breastfeeding could have more disadvantages than advantages for the health of infants! The use of DDT is not permitted in agriculture in Western countries. However. European organochlorine insecticide, lindane, is commonly used. In many European countries, it is found

in breast milk and cow's milk.

A study conducted in Italy isolated organophosphate pesticides, malathion and parathion, in a mother's milk four days after the birth of her child...

Various studies have shown that the increasing use of nitrogen fertilisers can cause vitamin C deficiency. Calcium, phosphorus, manganese and sodium levels are also affected,² '¹ Current genetic research aims to develop insect-resistant plants, which would eliminate the need for insecticides

- and others that fix nitrogen from the atmosphere and soil - which would save on nitrogen-based chemical fertilisers that pollute water, soil and, by extension, our food.

The greenhouse effect

The atmosphere surrounding the Earth ensures the stability of the planet's temperature and ecological balance. Like the glass in a greenhouse, the atmosphere absorbs some of the radiation emitted by the Earth and returns this energy to our planet. But industrial activity is changing the composition of the atmosphere. At fur and at measure that they are

produced and released into the atmosphere, certain gases, such as carbon dioxide, absorb a significant amount of radiation, which they then re-emit towards the Earth. These gases, which space, contribute to raising the escape into temperature on the Earth's surface. Since the beginning of the industrial revolution, the level of carbon dioxide in the atmosphere has already increased by 25% and is expected to rise by 39% over the next fifty years. This gas, which is involved in the process of ozone formation and threatens decomposition. reduce to concentration in the upper atmosphere.

Ozone, a gas composed of three oxygen atoms, acts like a veil, protecting the planet and its inhabitants from the direct action of the sun. Ozone is the 'parasol' that filters ultraviolet rays. Without ozone, the Earth would be bombarded with radiation that neither humans nor animals could withstand

Following a constant process, ozone is formed from oxygen in the upper layers of the atmosphere and then decomposes naturally. Various chemicals, including CFCs used as propellants in aerosols and technologies from refrigeration,

accelerate its decomposition.

Danger of ultraviolet rays

Ultraviolet rays are responsible for sunburn, eye damage, skin cancer and premature ageing. They slow down photosynthesis and delay the germination of many plant species, affecting plant growth. Algae are particularly sensitive to ultraviolet rays. Damage to the ozone layer could disrupt the marine balance by hindering the reproduction of algae and, at the same time, that of fish. Higher levels of ultraviolet rays would increase the incidence of skin cancer, particularly one of the most deadly forms: melanoma.

It could cause an increase in eye diseases and weaken the immune system. A 3% reduction in the ozone layer would cause 20,000 additional cases of skin cancer each year in the United States alone.

Sea level

According to some forecasts, the greenhouse effect could

cause temperatures to rise by 3 to 4

°C and, as a result, rising sea levels and warming sea ice will cause the oceans to expand. Sea levels could then rise by 20 to 140 cm, which would be more than enough to flood vast unprotected coastal areas. About one third of the world's population lives less than 60 km from the coast. A sea level rise of just 50 cm would have dramatic repercussions. Many ports and cities would be threatened with flooding, leading to significant population migration.(21)

Celestial pollution

Another, more unusual form of pollution is posing a growing threat. The Earth is currently surrounded by satellite debris travelling at cannonball speed, which will one day make it impossible to venture into space!

Comments by Commander Cousteau

"I've had a house in the countryside for ten years. At first, there were swallows, robins and mosquitoes. Today, there are no no mosquitoes, but there are also no swallows, crickets or butterflies. Small planes have sprayed pesticides on the crops to protect them. If we continue like this, we will never see swallows, dragonflies or butterflies again. Well done!"

Desertification

Every year, some 6 million hectares of land around the world are irretrievably lost to desertification, and around 21 million hectares have become so degraded that it is no longer economical to cultivate them. Desertification is the logical consequence of deforestation. Runoff water washes away the thin layer of humus, which is the most fertile. Water no longer has time to seep into the soil and groundwater tables dry up.

The figures are alarming: 850 million people live in dry areas, including 500 million in rural areas. Between 1994 and 2000, the population of arid lands will have increased from 850 million to 1.2 billion. In the 1970s, the world turned its attention for the first time to the causes of drought in the Sahel, which was responsible for the deaths of more than 120,000 people and 3.5 million head of livestock.

Disappearance of tropical forests

Tropical forests are being destroyed at a rate of 24 hectares per minute!

The need to expand farmland is the main cause of deforestation. It is estimated that agriculture is responsible for 70% of deforestation in Africa, 50% in Asia and 35% in America.

Brazil has 26.5% of the world's forest reserves, Zaire 9.2%, Indonesia 6%, and Peru, Angola, Bolivia and India 3% each. The diversity of fauna and flora in the tropical forest is astonishing. In an area of just 40 hectares, 1,500 species of flowers, 750 species of trees, 400 species of birds, 150 species of butterflies, 100 species of reptiles and of flowers, 750 of trees, 400 of birds, 150 of butterflies, 100 of reptiles and 60 of amphibians, not to mention countless insects. Thirty-three developing countries export wood products. By the year 2000, there will be only ten. ²²

The importance of NGOs

To date, non-governmental organisations are among the most effective agents in the fight against deforestation. They owe their success to their targeted operations, their flexibility and their willingness to involve local communities in their activities. According to a UNEP study, the ratio between money invested and results achieved is very encouraging. The essential condition for the success of projects is the participation of the local community. If the community plans and manages its mutual aid programmes locally, they are much more likely to succeed than large-scale projects managed remotely by bureaucrats. (23)

Water around the world

It is thanks to water that Earth, our beautiful "blue planet", owes its special place in the solar system. The volume of water in the world is 1,400 million cubic kilometres, of which 97%

% is seawater. The remaining 3% of fresh water is broken down into 22% groundwater, 77% glaciers and only 1

% in the hydrological cycle. Approximately half of the fresh water in this cycle comes from rivers, lakes and marshes (this figure drops to 15% in the Amazon). Unfortunately, water is unevenly distributed across the continents. Arid and semi-arid lands cover one third

of land area and are home to 600 million inhabitants. In these countries, every drop of water is therefore precious. But we should not think that we are safe in so-called "fertile" regions, as water is also likely to be in short supply there. A study conducted by the United Nations Economic Commission for Europe has established that five European countries - Cyprus, Malta, Poland, Romania and Ukraine - will suffer from water shortages in the near future. Five other countries

- Bulgaria, Hungary, Luxembourg, Greece and Turkey - will soon face the same problem.

None of the attempts made to date to find solutions – cheap techniques for desalinating water, for example – have yielded satisfactory results. Seawater desalination plants, which produce nearly 5 billion cubic metres of fresh water each year, do so... for rich countries.

And that's not all! Despite this impending shortage, water is being wasted at an astonishing rate. Here are a few examples:

By the year 2000, Mexico City alone will discharge 2.6 billion cubic metres of wastewater, of which a large portion

could be used for irrigation.

In Spain, golf courses consume as much water each year as 3 million Madrid residents use for domestic purposes.

Agriculture is the main consumer of fresh water. But often, 70 to 80% of the water never reaches the crops!

More and more countries are pumping water from their aquifers, which are 3,000 times more abundant than surface water. Unfortunately, the chemicals used in agriculture, particularly nitrates, are beginning to contaminate these reserves.

The figures concerning the 1% of fresh water that remains are as follows: 73% of this water is used by agriculture, 21% by industry and only 6% for domestic consumption; 1.7 billion people suffer from a shortage of drinking water and 3 billion lack sanitation facilities.²⁴

Water, the source of life

According to the World Organisation Health of the , 4

million children die each year from diarrhoea caused by water.

The largest quantity of fresh water on the planet is trapped underground. Certain regions of the Sahara and Arabia also have their own aquifers. River water takes about sixteen days to completely renew itself, marsh water five years, lake water seventeen years, and groundwater 1,400 years. In many parts of the world, water is wasted at an astonishing rate. Drinking water is used in industry and agriculture when wastewater could easily replace it.

Rainfed agriculture—which relies solely on rainfall—accounts for two-thirds of global crops. However, in many regions, land devoted to this type of agriculture is in poor condition.

On average, rain-fed crops produce one kilogram of harvest per cubic metre of water.

When the desert blooms

Yet there is still hope. In Africa, for example, the exploitation of water could improve the

yields from more than 50 million hectares of agricultural land. Thanks to an FAO programme funded by Italy, the population of Keita district in Nigeria has transformed nearly 5,000 square kilometres of depleted land into a thriving garden where crops, trees and livestock flourish. Community participation contributed greatly to the success of the project, which involved planting trees, drilling wells and building terraces and barriers to protect against sand dunes. A technically viable venture with socio-economic benefits.

The Mexico City administration replaced 350,000 toilet cisterns with 6-litre models, saving enough water for 250,000 residents.²⁵

Industrial waste: heading for the Third World

The problem has become crucial for all industrialised countries. It is estimated that 400 million tonnes of toxic waste are disposed of by the United States and 150 million tonnes by Europe. These figures are approximate, as statistical studies are not conducted in the same way in all countries, with some referring to what others consider 'special waste' as 'hazardous waste'.

special waste" what others consider to be "hazardous waste"...

Using Third World countries as dumping grounds is common practice and costs two to three times less than the treatment imposed in industrialised countries for toxic waste, estimated at \$160 per tonne.

In 1971, Willy Brandt, German Chancellor and Nobel Peace Prize winner, stated that "when our planet's reserves of water, oxygen and raw materials are exhausted, the peace we are fighting for today will be meaningless to a poisoned and starving humanity." At the dawn of the third millennium, we are already in the red! Population growth is increasing energy needs. This leads to a risk of accelerated devastation of forests and grasslands and an increase in non-degradable and toxic substances in nature... Konrad Lorenz lamented that "Descartes' grandchildren behave as if they were the sole owners of life, the biosphere, and even the universe."

The world spends a million dollars a minute... on weapons.

According to the Stockholm International Peace Research Institute (SIPRI), military spending amounts to \$550 billion per year, or just over \$1 million per minute. During that same minute, 27 children die of hunger worldwide.

Developing countries spend three times more on defence each year than it would cost them to provide basic services such as drinking water and medical care for their entire populations.

As for the arms industry, it employs 40,000 highly qualified scientists and researchers, or 40% of the world's "brainpower"...

The Gaia hypothesis

In the early 1970s, James Lovelock, a researcher at NASA, was working on finding traces of life on Mars. He published his famous Gaia hypothesis, suggesting that the Earth behaved like a living being named after the Greek goddess. Beyond the controversy over the scientific basis of Lovelock's claims, the hypothesis has had a profound impact on our understanding of the planet.

Lovelock, Gaia helps to strengthen the bonds between humans and their environment. It forces us to face up to our responsibilities, which is why Lovelock is considered one of the pioneers of ecology.

Lovelock observed that the atmosphere of Mars is stable, in perfect chemical equilibrium, meaning that the components of its atmosphere do not change and do not interact with each other. In contrast, the Earth's atmosphere is in a state of constant imbalance. This atmosphere is composed of several elements, including oxygen methane, which continuously react with sunlight form carbon dioxide and water Nevertheless, the Earth's atmosphere remains constant. Although it undergoes a tremendous process of combustion and renewal, the volume of oxygen and methane does not vary. These are the characteristics of a planet that supports life: an unstable atmosphere but one with a constant composition. According to Lovelock, the only possible explanation for this phenomenon is the insertion of the atmosphere into a global system "where the interaction between its many elements ensures the harmonious functioning of the whole."

Most accounts from astronauts and cosmonauts corroborate this strange feeling that the Earth is a living being. But in the myth of Gaia, another notion comes into play: that of destruction. The goddess protects humans who respect the laws of nature but mercilessly destroys those who violate them. The Earth's purpose is to protect life and protect itself, but it is clear that if humans disrupt the system to the point of threatening it, they will suffer the consequences.

In the 1970s, Lovelock envisaged several possible scenarios: changes in oxygen levels, sudden weather changes, the appearance of a predator or a virus, for example... It is difficult not to think of HIV

With Lovelock, the boundaries between disciplines – biology, physics, chemistry, etc. – tend to blur. The separation between the inert and the living disappears...

We have referred to the "Gaia hypothesis", one of the most scientifically advanced models for understanding how the Earth works as a whole, because it is surprisingly similar to the beliefs of our Mexican farmer. Although he was illiterate until recently , his conceptions animist overlap with those of indigenous peoples, who have always believed that everything, even stones, is alive.

Today more than ever, we must react against the "failure to assist nature in danger", which risks leading to a veritable "green genocide". In this dramatic context, could the environment not be a factor of unity and solidarity among the inhabitants of Earth?

THE DISEASES OF CIVILISATION

Ageing accompanies progress

The Western nations experiencing the greatest technological advances are also those with the lowest birth rates. They are therefore doomed to an increasing ageing process. In a few years, only one in five French people will be under the age of twenty. It is in this context that Thierry Maulnier, of the Académie Française, said: "We are forced to look to a future where the peoples of the Third World will have not only the advantage of numbers over ours, but also that of youth."

Some scientists – Darwin foremost among them – have

observed that societies, like animal species, obey an implacable law of elimination of the least adapted. The essential element in natural selection is biological, and the punishment is severe. The least prolific are therefore destined to disappear.

Suicide, one of the leading causes of death among young people in industrialised countries

The number of suicides among young people is growing at an alarming rate. It is the leading cause of death among those under 35. In France, the figure of 11,644 suicides and 120,000 suicide attempts in 1992 prompted certain public figures to sound the alarm. Men are three times more likely to commit suicide, even though women attempt it twice as often. Books such as *Suicide Mode d'Emploi (Suicide: A User's Guide)* have fuelled a heated debate in the media.

The cost of stress in France: one billion francs per year

Who would have thought it? France, a country of civilisation and culture, is home to the most anxious citizens on the planet. Comparisons of doctors' prescriptions prove this. Since 1984, on 100

consultations, the prescription of

49 anti-stress drugs (mainly benzodiazepines) compared to 31 in Germany, 23 in England, 21 in Italy and 13 in the United States. The tranquilliser market is worth over 850 million francs a year. According to an analysis of a representative national sample of 50,000 prescriptions, this cost now stands at one billion francs.

To discover the reasons for this growing disaster, SOFRES conducted a survey. This revealed that 64% of men and women are worried on a permanent or episodic basis... "Happy pills" are valuable aids, but they are not enough. According to one specialist, the French lack a taste for risk and, beyond individual pathology, a holistic view of health.

Stress contributes to the development of cancer.

In mice and monkeys, stress plays an important role in the development of certain types of cancer. It may have a similar effect on humans. Experiments conducted by Dr Vernon Riley of the *Fundacion del Nordeste Pacifico para la Investigation* prove that stress caused by anxiety increases the production

hormones called corticosteroids. When present in excess, they damage the body's defence system and make it more vulnerable to viruses and the development of cancer.

During an experiment, the researcher inoculated two groups of mice with a virus that promotes breast cancer. In the first group, which was subjected to loud noises and frequent cage changes, 60% of the females developed cancerous tumours after 13 months. In the second group, placed in a calm environment, only 7% did. The experiment showed that, in mice, the increase in corticosteroids caused by stress resulted in a shrinking of the thymus, spleen and some lymph nodes that are very important for the production of white blood cells, which help fight disease.

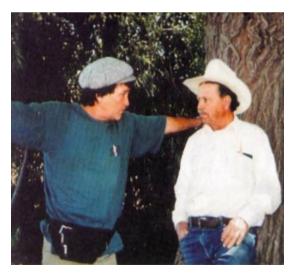
Stress = disease

We all suspect that stress causes fatigue and illness, but until now, medicine did not know why. In the scientific journal *The Lancet*, a group of American doctors discovered that a hormone produced in response to stress, corticotropin, could be

attach to immune cells and simultaneously stimulate the production of a series of small regulatory proteins that promote the reproduction of viruses such as HIV. If this hypothesis is confirmed, antagonistic strategies designed to protect the lymph nodes where immune cells are located should be able to stop the process. But according to Dr Julio Licinio and his colleagues at the National Institute of Mental Health in Bethesda, we are unfortunately not there yet. It has also been suggested that these proteins activate oncogenes that can initiate the cancer process. Corticotropin is one of many substances caused by stress. It influences the response to pathogenic behaviours and increases susceptibility to disease. It is found in the part of the brain responsible for stress and emotion. It acts as an important mediator in the interactions between the nervous and immune systems.

This brief overview is not intended to discourage the reader, but rather to encourage them to reflect on the need to change our mindsets. Protecting and rebuilding our environment must be everyone's concern so that humans, water, the earth and everything surrounds us can coexist in peace and mutual respect... It is in this context that some of the solutions proposed by Don José Carmen stand out as real and immediate opportunities to heal our world. The political positions taken by environmentalists initially brought the hope we had been waiting for, but their rhetoric failed to meet public expectations and they did not succeed in raising awareness.

For humanity to survive, it is not enough to decontaminate the water, soil and air; we must relearn what we have forgotten: that water, soil and air are entities as alive as we are. Our attention and respect are essential if we wish to coexist in harmony!



Yvo Perez Barreto and Don José Carmen

First images of giant plants

I remembered what the healers had told me: plants themselves teach us about their properties and healing powers. José Carmen's results were proof that communication with plants was possible.

After finishing filming a documentary on traditional medicines and methods used by healers in southern Mexico, which convinced me more than ever that true wisdom is still preserved in ancient traditions capable of revitalising our world, I was finally able to return to Valle de Santiago and film a particularly impressive squash harvest.

My first meeting with Don José Carmen had been limited to observing the phenomena I had been told about. I had to spend a month

on his farm before he agreed to talk at length and allow himself to be photographed.

My documentary was already called *Magical Mexico*, but I didn't yet know if the images of Don José Carmen and his giant crops would fit anywhere in the film. At the end of the editing process, I remembered what the healers had told me: plants themselves are responsible for teaching their properties and healing virtues.

José Carmen's results were proof of a possible communication with plants. I finally decided to insert this sequence on giant vegetables – short, as it only lasted a few minutes – into the last part of *Magical Mexico*. The success of this film with television stations around the world and the interest that these images aroused in the public confirmed not only that I had not been mistaken, but also that I needed to explore the subject further.

After some hesitation, Don José Carmen agreed to let us film his harvest. Here is the dialogue that accompanies the images:

Yvo - We heard speak about your

amazing harvests. How long have you been working like this?

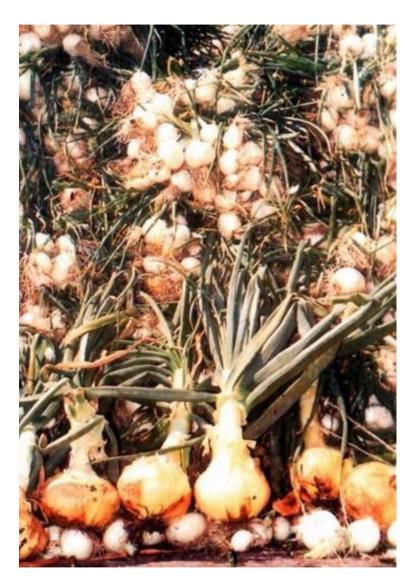
José Carmen - Our initial research dates back to 1969.

Y. - And the extraordinary results?

J.C. - From 1973.

Y. - What caused this phenomenon?

J.C. - It's more than a phenomenon. It was the idea of moving forward. Because... we had no other options... neither scientific, logical, nor practical. I didn't go to university, and I think I owe a lot to my ignorance. My idea was to move forward. We started learning through the school of life and through experience in the fields... And we achieved very good results! At first, this land produced nothing, and I had neither money nor any particular expertise. But I was driven by the idea of moving forward. So I would sit next to the plants, ask them to help me, and start looking at them differently.



Ordinary onions compared to José Carmen's

That's how I achieved rewarding results. It's true that I achieved remarkable results.

Y. - With the onions, what yield did you get per hectare?

J.C. - We achieved maximum yield in 1975, with 110 tonnes per hectare. The average yield in the region is around 16 tonnes per hectare. I also get excellent results with cabbages. I've increased my production by 1000%... If I told you that an onion plant weighs 10 kilos, you wouldn't believe me. And yet, the proof is there. I can also multiply the yield of squash, cereals and shrubs. I'm not there yet with corn, but I have grown plants that are 5 or 6 metres tall. It's not the height that matters, but the number of ears on each plant. If others haven't made progress, it's because they haven't changed the way they think and act. It's not that they're not capable... They just need to change their mindset.

Y. - Do you think there is a relationship between humans and the plants they grow?

J.C. - Undoubtedly.

- Y. Do you think plants have a life of their own?
- J.C. Of course. I've always believed that if the earth produces, it's because it's alive. And to be alive, it must feed on organic matter, not just chemicals.
- Y. Are you saying that you don't believe in the effectiveness of chemical fertilisers?
- J.C. Yes, they are essential, provided they are used in moderation. Otherwise, they burn the soil. To get a good harvest, I sow grass or clover, which I turn into the soil at harvest time and which acts as a natural fertiliser. This regenerates the soil. I also add manure, which is a living material.

What I'm trying to do here is increase the number of ears and improve yields, as I did with onions, courgettes and other plants. Naturally, the fact that they produce so much proves that they are vigorous.

- Y. I'd like to know if you have a method for communicating with your plants?
- J.C. I have learned to recognise when a plant is thirsty

- thirsty, to spot diseases and disturbances.
- Y. How do you know when a plant needs water?
- J.C. It's very easy: I look at it. Telepathy, perhaps... I don't know.
- Y. Since your knowledge is intuitive, how could it be passed on so that everyone can benefit from it?
- J.C. Through practice. You have to work the land while observing the plants. It's absurd to follow instructions to the letter and stick to the recommended watering frequencies when every plant is different...
- Y. Do you think this method could be shared to help solve world hunger?
- J.C. Yes, by giving demonstrations. We could set up a training ranch. Convinced by the results, interested parties might be persuaded to change their way of thinking. They would see that it is possible and would then spread the word about the method.

- Y. What needs to be done to create this pilot ranch?
- J.C. Build it and find people who want to move forward. We need about a hundred hectares.
- Y. In your opinion, what type of energy is involved in the phenomenal growth of giant plants?
- J.C. According to the analyses of agricultural engineers, it is solar energy. Energy that is available to everyone.

After filming, our conversation continued, and it was just as surprising as ever:

José Carmen - What we need to do is ask the plant what it needs and what it doesn't need. But scientists, full of their own importance, don't see the need to do this.

Yvo - It doesn't occur to them that your plant could suggest what it needs, does it?



Both are beetroots

- J.C. Even if some have vaguely considered the possibility, even if a few are doing research in this direction, most do not feel capable of such an approach. Worse, they think it's pure madness to consult a plant!
- Y. The giant vegetables I tasted were delicious, especially the beetroots. Currently, European imports of

fruit from Latin America are considerable. Our markets are full of mangoes, bananas and papayas from Peru, Brazil, Mexico, Chile, etc. These countries are said to be poor, yet our markets are overflowing with their produce...



Personally, I don't eat much of this fruit in Europe. It doesn't have much flavour, it all tastes the same and often has an artificial taste. Nevertheless, this fruit is sold at a higher price than locally produced fruit because people know it is of better quality.

Compare a banana produced by France in the West Indies with a banana from Brazil or Ecuador, for example: in the West Indies, they are often smaller and less flavourful. They prioritise quantity over quality...

José Carmen seemed willing to reveal things to us. However, he remained a little wary. His reserve was perhaps due to articles written by tabloid journalists who saw his giant crops as nothing more than a curiosity, something to fill the pages of their newspapers. This often prevented me from deepening our dialogue.

Who was this man who was able to grow gigantic vegetables – which seemed to be the fruit of his communication with plants – and who was also able to naturally immunise them against all pests without resorting to







What we need to do is ask the plant what it needs and what it doesn't need. But scientists, full of their own importance, don't see the need to do this.

pesticides, and, even more surprisingly, to make rain and perform many other wonders? Even though, during those years, I devoted myself to other projects that were also close to my heart, I always came back to the phenomenon of giant vegetables and the character of Don José Carmen. I was consumed by the desire to know more.

I had to return to Mexico several times to follow the thread of this tangled web and develop the plot that would allow me to understand it better. I don't know today if I have succeeded. José Carmen is a farmer, at first glance like any other, with a closeknit family and an ordinary life, although he is increasingly sought after by farmers throughout Mexico. You could say he is the pride of his town.

During my stays, I often accompanied him at 6 o'clock in the morning when he left to work in the fields. I was fascinated by the world of this simple man with a radiant presence, whom I found impossible to read and who was unlike anyone I had ever met before. His sober life, without alcohol or tobacco, spent scrutinising the earth and the "skin" of his

plants, attracted me irresistibly.



Don José Carmen with his wife and children

Who was he? Where did he get all this knowledge? The neighbours greeted him with respect.

He had gained great prestige in the valley and, since then, throughout Mexico. Until his giant vegetables appeared, the town of Valle de Santiago was not even marked on the roads of the state of Guanajuato.

Currently, many people come to consult him not only for problems with

crops and diseases, but also to find out where to find water underground, how to crossbreed one plant with another, etc. I too came from far away to bombard him with questions:

Yvo - You could have been just another farmer. Where did this passion for research come from?

José Carmen - I think I owe it to a cosmic influence... Every human being is influenced by astral circumstances.

- Y. How many children were there in your family?
- J.C. There were four of us. One died, so there were three of us left. I'm only talking about my father's children.
- Y. How long have you been studying plants?
- J.C. Over forty years.
- Y. Does that bring more than studying agronomy?
- J.C. When an agricultural engineer enters university, if he is not from the countryside, he knows nothing about the land. When he leaves, his knowledge

is limited because he has never worked it. Theoretical knowledge does not necessarily lead to understanding...

I don't know how many trips I made to Mexico. I had grown accustomed to the train that crossed all kinds of landscapes before reaching the state of Guanajuato, to the old omnibus that dropped me off in Valle de Santiago. And each time, I was filled with the same hope. I thought that this village might hold the miracle solution to ecological problems and world hunger...

I sometimes found Don José Carmen discouraged by the authorities' lack of understanding:

- Y. Why didn't the university continue with this project, which was working?
- J.C. Because there is jealousy. Here, graduates cannot accept that someone who is not a doctor can teach them anything.

His connection with the earth, coupled with his exceptional intuition, were not the only sources of his surprising abilities.

One day, discussing the origin of his knowledge, he

mentioned meeting two Germans; he called one of them the Master of Mixtures. He also told me about a Tibetan monk:

Y. - How did you meet these Germans?

J.C. - By chance, when I went into a café for a drink with one of my friends who was their secretary. That was in 1950. I stayed with them until 1964. One claimed to have been born to a Mexican mother and an Italian father, but in reality he was German. The other came from East Germany and had worked with a group of Russians before the war. An officer in the Wehrmacht, he had no qualms about telling the German government (he never mentioned it, but he was referring to Hitler) that the best way to dominate was not through armed conflict, but only through mastery of technology, which was not to the liking of his superiors. As a result, he was punished by being assigned to a particularly dangerous position on a submarine. He later worked in Tialpan, in San Angelin's laboratory.

Y. - When you met these Germans, did you already have this concept of energies?

J.C. - I was looking for how to improve

agricultural production with manure or compost. I was still a long way from the results I would later achieve.

- Y. Were you already practising communicating with the cosmos?
- J.C. No. As far as the cosmos is concerned, that came last. It was the Tibetan monk who introduced me to this approach.
- Y. Why did the monk approach you?
- J.C. He came directly to me and said:

"I can help you. And when you're ready, we'll do some good work." I asked him to give me his phone number and address. He started laughing and said, "We don't have those kinds of communication tools, but know that from now on, you'll be able to talk to spirits. In fact, you've already started, but this is just the beginning."

Y. - And was that true?

J.C. - For some time now, yes, I had been in contact with the spirits. In particular, I communicated with the spirit of what was once Anahuac (the ancient name of Mexico) and

from whom I learned a great deal. And from there, I learned how to improve my relationship with plants and obtain fruit.



Don José Carmen (third from left) with some of his produce



José Carmen's 3-hectare field

- J.C. For some time now, yes, I have been in contact with spirits. In particular, I communicated with the spirit of what was once Anahuac (the ancient name for Mexico), from which I learned a great deal. From there, I learned how to improve my relationship with plants and how to obtain fruit.
- Y. How did the Tibetan monk hear about you?
- J.C. It's part of his power. The first thing that manifests itself when he comes is the

smell of incense. That is the sign that he is there. First the smell of incense...

- Y. If you had met met the German, would you have followed the same path?
- J.C. I was searching for answers from a very young age. But there's no doubt that these men showed me the way.
- Y. But when you were a child or teenager, were you interested in these subjects?
- J.C. Ever since I was born, I've always been drawn to the countryside. And I think that... yes, there was definitely something. Now, it seems that I serve as a medium for spirits or Mother Nature, but I don't lose consciousness. Even when 'they' speak through my mouth, I can still hear and be fully aware of everything that's going on around me. Mediums who lose control of themselves seem unreliable to me. When I was little, I had the ability to leave my body. My parents thought it was an illness because when I wasn't sleepy, I would go to a place where the sun was shining very brightly, very clearly, very strongly. I would see myself floating in the wind. I think that if I had

- If I had retained this ability, it would be easy for me today to travel to other planets through simple mental concentration.
- Y. Why do you think this power stopped?
- J.C. According to my parents, it was wrong. So I tried to curb this power. I stopped and it gradually faded away.
- Y. At what age did you give up your gift?
- J.C. Around the age of eight. Today, I don't think that was a very good thing.
- Y. It doesn't seem to me that this ability you had has completely disappeared. If you can tell from here where there is water elsewhere, it may be because you still know how to "travel"!
- J.C. I don't know how it works, whether it's a split personality or whether it's linked to particular energies. All I have to do is think hard about a place and, a few seconds later, the information comes to me. I've done it many times and I've never been wrong. People come to me to find out if there is water under their land. They often come from other states, and I tell them from here

- . Sometimes I make the trip to show them that the water is indeed where I found it.
- Y. What is your dearest wish, Don José Carmen?
- J.C. My dearest wish? It would be to live a very long time.
- Y. Hundreds of years?
- J.C. Not hundreds of years, but long enough to see the fruits of my labour...
- Y. To achieve everything you have in mind, a lifetime would not be enough... How long will it take you to complete your priority projects?
- J.C. If I devoted all my time to them, I think it would take me at least twenty years...

GREEN THUMB

Yvo - Don José Carmen, there is a very common idea: some people are said to have a "green thumb", a gift for growing plants in their homes, for example...

José Carmen - These people are born with a talent for growing things. There are people who, instead of working in an office, should be farmers, and vice versa.

Y. - But why do plants wither in certain hands?

J.C. - Because there is incompatibility between their energy and that of these people. Plants are classified into several groups. You can do good work with one of these groups, or even with two, three or five, but not with all of them. No individual can get along with all plants! Plant groups are based on their energetic affinities. For example, although mangoes and avocados look alike, their energies are very different and do not coincide. Certain crops can be happily combined, such as red beans and maize, because they are plants that help each other. But others

can fight each other. Sometimes one even kills the other. Their struggle is merciless. It's the same with humans: you can't be friends with everyone. There are humans that no group of plants will accept. That's because, like them, we are made up of energy. We call our energy our "soul". If a plant's energy clashes with ours, the plant would rather die than accept it. Some plants accept me, others don't, and I can't grow them.

- Y. Most of the healers I have known the real ones, not the charlatans have told me that it is the spirit of the plant that has shown them how to heal. They also told me that some plants are good and others, which have a negative spirit, are bad...
- J.C. A good healer does not treat two people with fever in the same way. He will treat the first with a certain type of plant, and if someone else arrives with a similar fever, he will consult again to find out which plant to use to treat them. If the energy of this second person is different from the first, then he will not be able to treat them with the same plant, because the energy of this same plant is no longer in

correspondence with the second patient. Even if the illness is the same, you still need to change the plant!

Y. - I learned about plants from healers. I can say that my respect for them dates back to when I saw them treating them like human beings. For example, they never break a branch unnecessarily. I have always been shocked by the fact that for Christmas, the great celebration of love, millions of fir trees are cut down around the world, only to be seen drying up in the streets next to the rubbish bins by the beginning of January... J. C. - Well, if human beings have the right to live, so do plants. Vegetarians sometimes say, "I don't eat meat because it's the flesh of a corpse"... Cutting down a plant is also murder...

If I say that I am able to identify plants that can be used as insecticides, fungicides or fertilisers on a global scale, it is because nature has given me a huge amount of information. I have "permission" to do so. I have no trouble communicating with certain plants and asking them for information. In fact, once you know how to do it, it's as simple as talking to a person.

Yvo - Do you believe there is a God?

Don José Carmen - Of course I believe in him. It's obvious that he exists! This God - or these gods - are the ones who rule the universe. Of course, it can only be a form of energy, something that we cannot see , but which, in a certain way, is

"One", as a person can be, but on another level, something that is not even within our reach.

- Y. If our understanding cannot comprehend it, can there be communication between these gods and us?
- J.C. Well, I believe that if human beings want to be happy, their only religion should be not to do evil. I am neither for nor against religions, whatever they may be. For me, they are all equal, but none of them interest me. What interests me is being in harmony with my fellow human beings. I know that if I do not harm them, they will not harm me. That, for me, is the best religion!
- Y. Not everyone is capable of producing

crops like yours. The proof is that others have never succeeded in doing so.

- J.C. It's because they think they're superior to nature! I've always believed that the Earth is superior, simply because she is the mother of humankind. I try to let her guide me, and I get good results. Many of us have done research, and we've been called crazy. For it to work, we'd all have to be "crazy"! Unfortunately, most of our contemporaries are too reasonable, especially the civil servants who hold power.
- Y. What characteristics do true gods have?
- J.C. That's difficult to answer. Let's say they are 'energy'.
- Y. But, according to our morals, are they good, indifferent, or...?
- J.C. They are rather just.
- Y. Compared to these supreme energies, would humans be a tiny energy?

- J.C. No, man is an energy created by the gods; he is their invention.
- Y. Have you developed a technique for communicating with these energies?
- J.C. I first established contact on a spiritual level, which I kept secret from everyone for fifteen or twenty years.
- Y. How do you establish this contact with the spirits?
- J.C. In the form of conversations.

Such were our conversations, as surprising as many of the stories circulating in Valle de Santiago, as astonishing as the landscapes of this strange region, commonly known as the Region of the Seven Lights in honour of the seven volcanoes that dominate it.

The craters of some of these volcanoes are now filled with water. This is the case of La Alberca (the "pool"), which is over 750 metres in diameter and serves as a beach and recreational area for local residents. Its waters contain large amounts of sodium compounds, which are considered to be excellent





Craters of the "Valley of the Seven Lights"

to strengthen the body. That is why children are bathed there as if it were their baptismal water! It is also said that the Alberca is a gigantic natural radar that was used in ancient times to receive messages from the stars. One of the seven other volcanoes is Yuriria. It has been observed that its waters turn red before an earthquake, as if it wanted to warn people of the imminent danger... It was in this imposing and historic place, near Valle de Santiago, that the interviews with Don José Carmen continued. I had returned to Mexico. with Florence Belfond. Despite our limited financial resources, we were determined to make a film about this extraordinary man. Germain Ignacio, our cameraman, had kindly offered to lend us his camera. And although we didn't have a sound engineer, we had enthusiasm to spare...

We all got into a boat, and it was in the middle of this large lake, in front of the camera and the tape recorders, which we tried to make as discreet as possible, that I resumed the interview.

THE BOATMAN (beginning)

Yvo - What is your name, my friend?

The boatman - Jesus. Where would you like me to take you?

Y. - Where there are rushes.

José Carmen - Let's go there there (he point the direction), this entrance looks like a canal. (The abundance of reeds on the surface reminded me of a lake I knew).

Y. - Did you know that on Lake Titicaca...

J. - What?

J.C. - He's talking to me... about a lake in the south, in Peru...

Y. - There is a floating city on this lake, this big, and the houses are all made of reeds. The Peruvians call it *totora*. It's wonderful to see this city floating in the middle of the lake... Its inhabitants cook and spend their lives on the water. But they can't make love in the same place for long, because they sink...

That's true! As long as we keep moving, nothing happens. But we can't stay in one place for long, unless we sink. They have to keep moving constantly.

J.C. - So how do they sleep?

Y. - They have a camp by the lake. That's where they sleep.

J.C. - And what do they do? Do they fish?

Y. - Yes. They occupy this city mainly when they fish. Then they return to camp. They are called the Uros, the 'people of the water'. They are small. Their skin is dark, almost black, because their blood is rich in red blood cells. They live at an altitude of over 4,000 metres. One day, you'll come there.

J.C. - Why not, if the opportunity arises?

As the Peruvian coast is experiencing serious water problems, I had thought of suggesting to Don José Carmen that he come and fertilise this strip of land, which represents one fifth of Peru.

Y. - I will take a book on codices to Peru, because curiosity about Mexico's past is

just as great there as it is for Peru's past.

At the request of the University of Agronomy in Chapingo, Don José Carmen had translated numerous agricultural codices. These codified manuscripts, based on drawings, illustrate the agricultural practices of Mesoamerican civilisations and are among the oldest texts in Mexico

Don José Carmen had original ideas about everything. For example, like many others, I was concerned about the inevitable ageing of the population in Europe, where social security is virtually bankrupt and where people are wondering who will pay for pensions in the years to come. At the rate things are going, won't Europe become a retirement home and Latin America, due to its population explosion, a kindergarten?

Official medicine in industrialised countries boasts of having significantly reduced infant mortality, but is this really an achievement given the small number of children? Children who have had to overcome the barrier of abortion and contraceptives...

Yvo - Don José Carmen, what do you think of the

birth control that is being promoted in Latin America?

José Carmen - When man fulfils his obligations and duties, he need only take what he needs from the earth to survive without having to worry about anything else. There is enough on this planet for everyone. All that is needed is the will to share fairly. People do not need to worry about birth control.

That is the problem of the globe itself. When the time comes, when its capacity to provide for its creation is exhausted, it will sterilise women, to the extent that this is necessary. We men should have no other concerns than turning deserts into forests, planting fruit trees, converting weapons into tractors, ploughs and pumps that will draw water from underground.



Agricultural codex deciphered by José Carmen

The boat glided slowly along and Jesus, the boatman, opened his eyes wide in amazement as the camera filmed us. Don José Carmen promised a renewal he had never imagined...

Yvo - Does that mean that what we call progress...

José Carmen - ... has been a step backwards? Certainly! Because we are polluting the lakes, the earth and our own bodies. Science has distanced itself from nature. It no longer listens to it.

Y. - For you, is the best way to listen to nature to also listen to the cosmos?

J.C. - Of course. All information comes from the cosmos. All information comes from outside. And this is true on all planets where human life exists.

RAIN

Yvo - How can we put an end to deserts?

José Carmen - By reforesting them, that's the answer that comes to mind. But to achieve this, it

We need water! So, the least expensive and most viable solution would be to cause what I call "inertia rain". But humanity, despite all its research, has never considered that water as an "essence" comes from outer space, from other planets. It is the cosmos that produces water. The Earth receives it. And, in turn, it gives the "essences" that other planets need. The perpetual motion of the universe allows, among other things, this exchange of elements or "essences". Humans cooperate in the same way when they trade with each other.

- Y. So it's a kind of barter on a planetary scale?
- J.C. Yes. But by destroying the Earth, humans are preventing this exchange, which is detrimental to them. If the planet Earth receives less "Essence water", fresh water is becoming scarcer.
- Y. Does man prevent this exchange?
- J.C. Yes. By deforesting, we prevent the Earth from fulfilling its mission, which is to dispense certain elements to other planets. As its vegetation decreases, it has less and less to give. However, the law of the Universe is rigorous. If

the other planets do not receive, they cannot give.

- Y. How can we get humans to renounce their destructive attitude?
- J.C. His ambition drives him to destroy trees. If he doesn't do it in his own country, he'll do it in another. To make paper, to make money... Nothing else matters to him but financial gain. When harvests are abundant, man destroys them to drive up prices. It doesn't matter if thousands of human beings die of hunger. Those in power plunder mineral deposits without any real need, just to stockpile them. If we have enough iron, why continue to extract it? Iron is necessary for life on the planet. If you give blood and they take more than the norm, they risk killing you. It's the same for the earth.
- Y. You talk about our planet as if it were a living being.
- J.C.- Who would dare to think that it is a dead being? Water is as alive as we are. Rain knows what it is doing. It protects vegetation. But if there is no

There are no trees, so what is the point of rain? With deforestation and the escalating use of chemical fertilisers and pesticides, we are killing life. It is time to change fertilisers. The fertilisers of the future must be based on sulphates, seaweed and organic matter. Three to five kilograms of these products will be enough to fertilise one hectare, instead of the five to six hundred kilograms of fertiliser currently used! But this requires researchers to take all results into account, wherever they come from, without stubbornly defending economic interests. Today, unfortunately, anything that is not immediately profitable is not taken into consideration.

- Y. I remember when I first came here eleven years ago, you told me that you used organic fertilisers and animal waste. Has your method changed?
- J.C. Organic farming is incomparable. It always has been. No soil can produce anything without organic matter. Reagents seaweed, for example will complement the plant. Just like crop residues mixed with manure. Without the organic matter

it produces, the soil will never be able to work properly... But humans, being harmful, take it away. When they plant cauliflowers to harvest the heads, they should incorporate the rest into the soil. But what do they do? They feed the remains to their livestock, when they should be leaving at least 20% in the soil.

José Carmen - Based on my research, I believe that the main "essence" that the Earth has to offer other planets is that produced by trees. And the one it needs most is

"the essence of water". Once the Earth has received this essence, the process of producing water will take thirty years and will take place in the subsoil of the immense laboratory that is Antarctica. The water we use today was produced thirty years ago.

- Y. But why are there places where there is water that specialists have not been able to find?
- J.C. The competence of those who searched for it is not in question. They simply did not receive "authorisation" to find it. The information is given at the same time as the "authorisation". All that remains is to locate it. But before drilling, certain conditions may have to be met

- imposed by nature and not by man. Such as reforesting specific areas. Reforestation with fruit trees, for example, which will also benefit humans.
- Y. Why does nature 'authorise' some people to find it and not others? How does it choose them?
- J.C. I don't know, and I may never know. The important thing is that it produces good results.
- Y. You don't know why you were chosen?
- J.C. I know I'm not the only one. There are many who have abilities similar to mine, or even better. I was lucky enough to make a name for myself when others couldn't or didn't know how.
- Y. You don't know why 'they' granted you this power?
- J.C. Experience allows one to mature. It is possible that successive reincarnations of a spirit help it to mature. One thing is certain,

the ego, so natural to the human spirit, prevents it from truly evolving. Without this ego, everything would be different! I don't know why I was chosen to improve agriculture on Earth. I only know that my home planet, where my essence originated, is forty times larger than Earth.

- Y. Do you have any memories of this planet?
- J.C. No. I receive information about it, but I have no memories.
- Y. If you want to go back, it's not out of nostalgia but to continue your existence?
- J.C. Exactly.
- Y. Which will only be possible if you accomplish the task entrusted to you here?
- J.C. My good will and what I have already accomplished prove that I am on the right track. It seems that I have the right to go back there. For example, by intervening to enable me to locate water in the Saudi Arabian desert
- I was able to verify that there is some you would be giving me the opportunity to fulfil my mission. I am

aware that this will not be easy, and I can already hear the comments: "This guy is crazy. Where are his qualifications? What did he study? Why is he proposing such a project?" Not to mention the jealousy of the "professionals"!

- Y. Yes, but current water needs are so pressing that specialists would be willing to try anything to find it!
- J.C. If they are intelligent, they will not take qualifications into account. They will let the facts speak for themselves. An initial demonstration would pave the way. It would also be an opportunity to show that other forces exist, and that they are the ones that really decide...
- Y. I see that you are also able to decipher the codices... Doesn't that take you a little away from your role as a farmer and your mission to reforest the land?
- J.C. No. Everything is necessary, everything is closely linked. These books contain essential knowledge for agriculture.
- Y. Why not start with Africa? Isn't that the priority today?

- J.C. Everything in its own time... If we haven't yet located water in the Persian Gulf, it's because we don't have authorisation. If I've been able to establish from here that there is indeed water there, it's because I've been granted that authorisation. I am certain that I will find fresh water, drinking water.
- Y. Doesn't that pose a moral problem for you? Africa is more in need of water than Saudi Arabia. That country is so rich that it could, if it wanted to, fly in water...
- J.C. Africa's subsoil is full of water. It used to rain there. It stopped raining because vast areas of forest were cleared in an excessive manner. What is needed today is to induce "inertial rain". Reforesting in order to recreate a permanent rain cycle. To induce this inertia rain, we must first check the energy entry point and then bury larger "discs"* in the ground.
- Y. There is a shortage of water in Ethiopia and Somalia. The population there is emaciated, thousands are dying... Don't you think this should be a priority?

J.C. - It is possible to do both. For Saudi Arabia, all we need to do is locate the water and go there to pinpoint the exact location. That will take a few days. As for Africa, establishing the circuit will indeed take longer. I am not the one establishing this circuit; it is our mother, Nature. She is the one who indicates which trees need to be planted. I am merely an intermediary, an instrument. It may seem incredible, but that is how it is.

* To understand how to use the discs, see pages 195 and 258.

ENERGIES

Yvo - When you talk about Mother Nature, are you referring to a spirit or to a cosmic energy outside our planet? It's not yet very clear to me because you sometimes talk about spirits and sometimes about global energy...

José Carmen - I am referring to spirits directly linked to the work I have undertaken. They are the ones who authorised me to translate the codices and who protect these areas of knowledge. They are the spirits of those who played an important role during their lifetime. We are at a lower level here . As fo , cosmic energies

, they are governed by other laws and cannot be used in the same way.

Obviously, energies are also graded. There are energies with which human beings can never come into contact because, if they approached them, they would simply consume them. But they can, if they wish, transmit information to them through a lower-powered energy. Energies have nothing to do with spirits. They belong to different worlds. Spirits are connected to the planet and cannot leave its atmosphere. Energies are linked to what lies beyond: the Universe, the cosmic realm. Obtaining permission to locate water, for example, depends on energies and not on spirits.

The planet has its secrets. How can I put it? There are probably universal rules that human beings can break when they are given permission to do so. In the case of Saudi Arabia, if water could not be located until now and it is now possible to do so, it is because the "powers that be" allow it. It is not related to the abilities of any particular person, but to the authorisation they receive. It is

- only in this way that the impossible becomes possible...
- Y. How do you plan to go about it? Will you go to the location you have previously identified?
- J.C. Yes. Once I get there, I will connect to the energies to mark out the area concerned on a map. I will then go there by helicopter.
- Y. You'll look at a map and say, "This is it"?
- J.C. Yes. And from the helicopter too, I'll say to the pilot, "It's here." It will be up to him to tell me the name of the place.
- Y. And what about Africa?
- J.C. In Africa, there are areas where it has rained heavily. It is in these areas that we must first detect the entry of energy from space. But we would need to use larger discs* in order to have adequate protection. Because to make it rain in Africa, we would need to use the "énergie temporelle d'une autre

dimension". This would be impossible without the power of the energy condensed in the discs. This would be a test circuit. That said, it is quite possible that we could make it rain over an area of about a thousand square kilometres.

Y- So we could cause "inertial rain" in Africa and find water in Saudi Arabia?

J.C. - It is necessary. To solve the immediate problem in Arabia, we must first extract water from the underground . And cause by the result of

"inertial precipitation" on all the deserts of the planet, or rather on 80% of them, because they too are essential to life on Earth!

Y. - Is it necessary to preserve some deserts?

J.C. - Absolutely. It's not a problem: the Earth will let us know which areas and how much land should remain desert.

Humans must understand that if they do not reforest, their planet has only twenty-five to thirty years left to live! The law of the Universe is such that if we If we do not act, Earth will become a dead planet. But if we intervene now, we can save life on Earth for millions of years to come. The planet will regenerate itself through reforestation. Thanks to reforestation, it will be able to carry out the exchanges it needs. A planet is like a human being: if it runs out of food, it dies...

Y. - The problem is that if you succeed in your mission to reforest the Earth and find water in every corner of the world, you will be called back to your planet. And we will be left without a firefighter!

* To understand how to use discs, see pages 195 and 258.

THE BOATMAN (end)

Yvo - Don Jesus, how long has it been...?

Jesus - I've been rowing for eighteen years. Before that, I was a fisherman.

Y. - Right here?

- J. I've never been anywhere else.
- Y. Not even to Guanajuato?
- J. No, I've never left this lake.
- Y. How old are you?
- J. I was born in 1924.
- Y. What energy! I hope to be as fit as you when I reach your age!
- J. You can do it!

José Carmen - Don't they say that hope is the last thing to die...

FORTY YEARS OF STRUGGLE

Hope is indeed an old friend of Don José Carmen. For years, he has continued to fight, despite the difficulties and hostility of certain interest groups who believe that his methods threaten market stability.



If water has not yet been located in the Persian Gulf, it is because of a lack of authorisation. If I have been able to establish from here that there is indeed water there, it is because I have been granted that authorisation. I am certain that I will find fresh water, drinking water.

One man against an entire system! And what a system! He has tried several times to inform the public and has issued press releases. Without much success. Here is one of them:

PRESS RELEASE

Valle de Santiago, 10 November 1987

Plants can be fertilised using industrial waste that is poisoning the world.

I am prepared to demonstrate this to anyone interested in building a laboratory to exploit this waste.

WARNING: This is a demonstration and not intended for prolonged use.

The process consists of placing five litres of petroleum residues in a large metal container. Then heat to boiling point. Leave to cool until the next day. Then add one litre of oil, another litre of commercially available sulphur sulphate and enough water to spray the leaves on one hectare of wheat. One spraying is sufficient.

I am prepared to demonstrate the effectiveness of this and other similar processes free of charge. However, as I do not wish to inconvenience or pressure anyone, I am not addressing any particular official. That said, I would like my country, Mexico, to be the first to benefit from my research.

José Carmen Garcia Martinez, "creator of giant vegetables"



The coat of arms of the Valley of the Seven Lights designed by Oscar Arredondo

Oscar the photographer

An old building at the end of a street adjacent to the Place d'Armes in Valle de Santiago, a town rich in colourful characters. This is where Oscar Arredondo, photographer and illustrator, has his studio.

An old-fashioned camera – complete with black cloth – sits on a tripod in the middle of a small colonial-era room. The walls of the adjacent room are covered with photos of José Carmen's giant vegetables. They hang alongside clippings from local and national newspapers reporting UFO and alien sightings in the region. I must say that most of the inhabitants of this town have strange stories to tell. Many claim to have seen spaceships entering and leaving the waters of the volcanoes

The colourful coat of arms, officially adopted by the town and designed by Oscar himself, shines brightly on the wall of the first room at Fotografica Mexico. At the bottom are the seven volcanoes of the valley. Above them is the constellation of the Great Bear. Stars and volcanoes follow the same path.

With his piercing blue eyes and broad forehead, Oscar, despite being 60 years old, is the only inhabitant of Valle de Santiago to cross the waters of the Alberca crater several times a week. At first, he closely followed the experiments conducted by Don José Carmen. Later, their work diverged.

His vehement speech, steeped in local beliefs, prompted me to start the tape recorder. Here is an excerpt from our conversations.

Oscar - We have discovered that telluric radiation rises up to 30 centimetres above the ground. This is why those who sleep on the ground enjoy better health than those who sleep in a bed. Because, beyond these 30 centimetres, you escape the Earth's magnetism, which has beneficial effects. Blessed are the poor, for theirs is the kingdom of heaven...

Consider this: terrestrial rays are the magnetic field that surrounds the Earth. They are located 30 centimetres above ground level. When a person is poor and cannot afford a bed, they remain in excellent health by sleeping on the ground, because these rays envelop their body and the charging with

magnetism, giving it health and vigour.

And when she does not have access to conventional toilets, she defecates in nature, in a squatting position. Because of this position, her appendix turns upwards and her intestine is freed of all the waste it contained. In conventional toilets, on the other hand, the appendix takes a downward position and the waste that falls into this pocket can cause appendicitis. This is a condition that does not affect those who adopt the so-called "eaglet" position.

The poor in the suburbs, who cannot even afford to buy shoes, walk on the hot earth, which is highly beneficial for the psychic centres, intuition and health. This is how unprotected, poor, marginalised people live closer to the laws of nature and enjoy enviable health. Why, in your opinion, do these filthy children from the slums not fall ill easily when they should be infested with germs? Imagine that people come from abroad to buy their blood at high prices to transfuse it to rich children and strengthen their defences.

Yvo - Where does this terrestrial radiation come from?

O. - Like the human body, the planet has an aura. Within ourselves, as on Earth, it is a magnetic centre that produces it. At the intersection of the beams are energy nodes, and there, plants do not grow. If, inadvertently, a house is built at the intersection of these beams, it will be uninhabitable. Its occupants will be nervous and suffer from all kinds of ailments that doctors will be unable to diagnose. There is only one solution: move out of these cursed houses!

Oscar - The cook at the Tangasneque camp said that giant chard was the most tender and tasty. It is important to know that the earth does not become depleted, for the simple reason that plants are born under the influence of cosmic forces and therefore also feed on elements from space.







Above and on the previous page: some of the many press clippings about Don José Carmen and the Santiago Valley

Oscar - There is none so blind as those who will not see. Look where we have ended up! The state of the rivers, the Earth, the atmosphere! What are we going to leave as a legacy to future generations? Where is the world heading with acid rain? What have we done to our planet Earth? Doesn't it resemble black magic?

We have completely ignored the left hemisphere of the brain, which corresponds to divine intuition, and we have devoted ourselves to developing the right hemisphere, that of material rationalism.

Excessive reasoning leads man astray. We must change direction and develop intuition in order to foster inspiration that will enable our desires to materialise

Yvo - What circumstances brought you together, Don José Carmen, his brother Veda and you?

Oscar - The three of us got together so often that we ended up creating a club we called The Seven Luminaries. Seeing the love we had for our Earth, important personalities joined us and gave us their support. That was in the 1960s.

Oscar - The cosmic cycles that sweep across the planet at intervals of three and a half hours alter the Earth's vibrations. These cycles can be favourable for agriculture, war, writing, etc. They are neither good nor bad in themselves; humans can use them as they wish.

Yvo - Do you mean that those who understand how these cycles work can use them? Whether they are spiritually pure and idealistic people, or people with malicious intentions?

O. - Yes. It is a universal cosmic science. Mysticism has no place here.

Oscar - Just as seeds can be charged with solar energy, the glands of the body can be energised using the same process. Let's take the example of an important gland: the pineal gland, located near the pituitary gland, in the centre of the brain. It is like a small seed connected to the Sun. I have found a way to recharge it with energy from an external source. What happens when the pineal gland is energised? At

On a macrocosmic level, the Sun is a magnetic star around which the planets revolve. The same is true, on a microcosmic level, of the pineal gland, which is a solar gland inside the body. When this gland is charged with its element, solar energy, the individual is transformed and becomes charismatic. I mean that people gravitate around them, like planets around the sun.

That's not all. When this gland is properly energised, it radiates through the palate, where the energisation occurs. This halo is released through the breath, and speech becomes hypnotic. What does a small child do, for example, when a toy is out of reach? They instinctively open their mouth as wide as possible. In this way, the pineal gland overcome channel tries to the mechanism that nature has put in place between the gland and the palate. In this case, the child is trying to imitate the covote, which has access to this channel. The covote opens its mouth wide and lets out a cry, a hypnotic solar halo that causes its prey to fall. Some snakes have the same ability, for example the boa. This channel is blocked in humans, but it is possible to open it by stimulating the pineal gland with the sound sun. element. The human being has

much more possibilities than a coyote or a snake. All he has to do is open his mouth and focus on a desire for circumstances to bring it to fruition.

How to proceed? Please note that the best times to energise the pineal gland are between 9am and 11am. Two hours, no more, during which you can only operate for a maximum of three minutes.

How? Open your mouth so that the sun shines directly on your palate and keep your mouth open for thirty seconds, a minute, or even two minutes or more, depending on your ability. A magnetic centre, a powerful ray of solar energy, a "halo", will then form on the soft palate. Here's how to do it (Oscar inhales deeply): "Ahhhhh..." And swallow the sun. Then, holding your breath, create an air pocket between your tongue and palate with all your strength. This compressed air allows the solar vibrations to mix with the halo that has formed on the palate. The pineal gland feeds on these vibrations as if they were food. It is best to do this in a seated position, as you will feel dizzy during the experience. You will see nothing but black But this

discomfort passes quickly. As with physical training, over time, you will notice changes occurring.

This initiation gives rise to a responsibility which, as I said, has nothing to do with good or evil. To each his own truth. A person who possesses real charisma and whose mind is well trained is capable of imposing his truth on others.

In the^{15th}century, there lived an Indian named Juan Diego. This Indian claimed that a virgin spoke to him. The clergy then asked him for proof of his claim.

Juan Diego brought them roses out of season, an image of the Virgin of Guadalupe imprinted on his cloak, and a new prayer. Centuries passed, and as this cult did not conflict with the interests of those in power, it grew. A few centuries later, along came José Carmen, a Veda, or someone like me, who claimed that there was an "intraterrestrial" civilisation and that its main access point was located here, on the side of the Culiacan mountain, in the Santiago valley. What is happening? It is no longer the prelates but the scientists who say, "Bring us proof and we will believe it." However, it is not

roses that fall from our symbolic cloak, but 45-kilo cabbages, chard leaves measuring up to 1.85 metres,

5 kilos, giant radishes... Not flowers, no, but food for everyone!

We did not bring the statue of the Virgin of Guadalupe with us, but we did bring a map of the area and scientific, archaeological and esoteric evidence proving that this civilisation exists and that Jules Verne's dream of a journey to the centre of the Earth can become a reality.

This discovery of a world within our own should be a landmark event: it is more important than the discovery of America! We have the means to produce this miracle, but unfortunately we are threatening some very powerful interests... In the various sectors of agriculture, poultry farming and fishing, subsidies and prices are distributed to reward those who manage to increase production. But in these same sectors, tonnes of products are sacrificed to keep prices stable. Millions of chickens are killed and shipments of fish are thrown back into the sea, without any concern for world hunger, all for the sake of the sacrosanct price balance! Eight tonnes are harvested where Our methods would allow us to obtain two hundred... But what would we do with such overproduction?

We canonise the saint while we crucify the master. Why? Because the saint performs miracles through his faith, while the master masters technique.

Yvo - A bit like the specialisation of the two cerebral hemispheres you were talking about earlier?

O. - We spend too much time thinking, reasoning and... making mistakes, because we refuse to make decisions ourselves. I challenge anyone who disagrees to find solutions to the evils caused by science: acid rain, polluted rivers, the ozone layer under increasing threat every day... Where will this 'logical' science lead us? Don't you think it's time to give the left hemisphere a chance? Intuition, inspiration?

Oscar - When Hernân Cônes was told that the entrance to a fabulous city was located in Mexico, he did everything he could to find the famous Chico Mostoc,

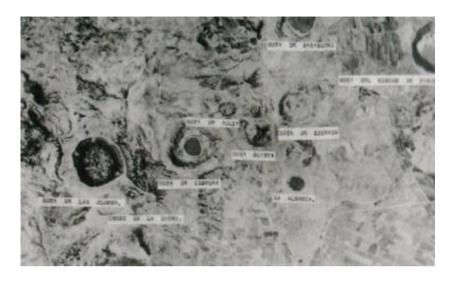
this sacred site with seven caves and seven cultures, located not far from a place called Culiacán. Admittedly, no one has ever discovered the entrances to this underground city, one of which, according to the legend of Mount Culiacán, opens up on one of its slopes. However, nearby, 22 kilometres east of the Santiago Valley, lies the highest hill in the state, aptly named Culiacán Hill...

In his book *Toltec and Chichimec History*, Paul Krisdiof was the first to mention this mystery and put us on the trail. As our country had been pillaged and ransacked, this German historian had to visit various museums around the world to piece together the facts. It was in Paris that he found the evidence he needed. In the codices! When Krischof climbed the mountain of Culiacán and saw the immense Yuriria lagoon at his feet, he was convinced that this was the place he had been searching for for so long.

The engravings in the codices show the Cave of Seven Grottoes, from which the various tribes that were to populate Mesoamerica emerged.



The Cave of Seven Grottos, from which emerged the tribes that would populate Mesoamerica.



Volcanic craters in the Santiago Valley (aerial view)

This fits perfectly with the seven volcanic craters in the Santiago Valley, which, according to an ancient Purepecha legend, were created by gods from space who caused meteorites to rain down. This also explains the connection with the constellation Ursa Major...

- Y. What are the consequences of such a configuration?
- O. It creates an exceptional cosmic field of attraction. The proof? There is not a single doctor here who has had to treat someone

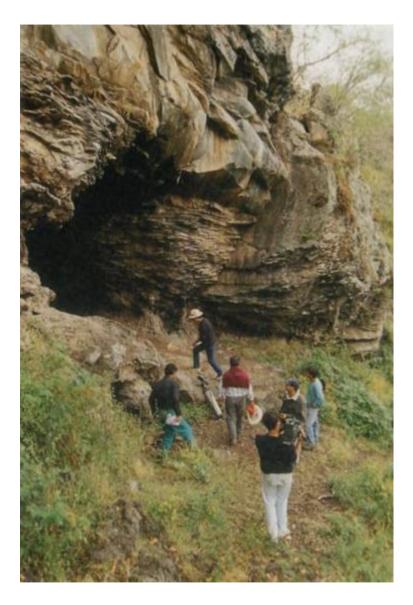
victim of trauma following a close encounter of the third kind...

- Y. Do you think that the Santiago Valley was chosen as a gateway to our planet?
- O. I believe that if an inhabitant of another planet wanted to access Earth, they would arrive at a place like this, because of all the signs I mentioned.

It is impossible to talk about Don José Carmen without mentioning the Valley of the Seven Lights, whose sacred nature has not protected it from the devastating actions of man. At the rate of one truckload per minute, the slopes of the volcanoes and their caves decorated with rock paintings are being transformed into materials for buildings and roads. This is despite the struggle led by Oscar Arredondo, at the head of part of the population, to prevent the destruction of these landscapes worthy of respect.



Landscape of the Santiago Valley



The entrance to the Culiacán cave

Beetroots

In 1994, during one of my trips to Mexico, I asked Carmelo – as I sometimes called him, although I was impressed by his extraordinary personality and still addressed him formally – to sow a few rows of giant beetroots so that I could "fix" them on film.

At harvest time, we found ourselves once again with our cameras on his three unforgettable hectares. A surprise awaited us there: enormous, shiny beetroots were packed tightly between the furrows that José Carmen showed us with joy.

For several weeks, our entire small film crew drank large glasses of delicious beetroot juice. I don't know if it was psychological, but we started each day with unusual energy. In front of the camera, José Carmen proudly lifted his beetroots in the sunshine.



A 45 kg cabbage...



An onion big enough to feed a family!



A chard leaf bigger than a person

José Carmen - This is proof that we can achieve much higher yields, not only here, but also on a global scale. These enormous beet have been the subject of in-depth studies

- . Engineers from the Department of Agriculture have observed an average yield of 305 tonnes per hectare, taking into account the size they can reach.
- Yvo Do you think everyone will be able to produce that much?
- J.C. No. Not everyone. Some people will understand more quickly than others. We will need to find people who can manage all the parameters.
- Y. I'd like to know if plants have feelings, for example.
- J.C. It's likely...
- Y. Can they fall in love, hate each other, be sad or happy, etc.?
- J.C. To find out if they can fall in love or even if they can meet, you have to ask them, to find out which one is male and which one is female. You also have to ask them if they agree to mate. They won't necessarily agree.

- Y. So, they have their own preferences too?
- J.C. Yes, of course...
- Y. Does that mean that plants love, just like us?
- J.C. If that weren't the case, they wouldn't reproduce.
- Y. Can you achieve this gigantism with all plants?
- J.C. No, there are some that I don't get along with very well. I've had Swiss chard with leaves reaching 1.8 metres. Oscar's photos prove it: the Swiss chard is taller than the cook who worked with us.
- Y. How long does it take to get such a harvest?
- J.C. A little longer than normal. It takes four or five months from sowing to when the plants reach their maximum size. A normal crop grows in three months

- Y. Why does it take longer?
- J.C. Because of the growth. Some people claim that this time frame explains their size, but that's not true, otherwise everyone would have giant beetroots.
- Y. How did you come to learn about fertilisers, which you have experimented with over time?
- J.C. I developed these giant growth techniques little by little. As I already told you, for fourteen years I studied under German scientists who had taken refuge here because of the war. From them, I learned many formulas for fertilising.
- Y. Always using organic methods?
- J.C. No, with sulphates and reagents.
- Y. Isn't that a bit toxic?
- J.C. That's why I'm asking you to submit my formula to a laboratory. Because when mixed together, the products undergo a transformation and some of them are not used

to fertilise but to neutralise the harmful effects of the others.

Engineer Ruben Almeida

We must acknowledge that the scope of Don José Carmen's discoveries and theories are beyond our comprehension and border on science fiction. But isn't the state we are putting our planet in also irrational?

In the 1980s, I met agricultural engineer Ruben Almeida at José Carmen's house. Slim and dressed simply in Western style, he stood out from the local inhabitants. He spoke to Carmelo with deference and looked at him with undisguised admiration.

As José Carmen's methods seemed to satisfy him more than the academic training he had received, I was interested in his opinion. Since he set up an autonomous unit near the pyramid of Teotihuacan, where everything is recycled, even human excrement, which is used to fertilise the vegetable garden, it is clear that he has chosen his side. It is there that he teaches

hand-picked students a new way of sowing and living.

Ruben - The word Mexico means 'in the centre of the maguey': *METI-CHI-CO. Meti* means 'maguey', *chi means* 'navel' or 'centre' and *co* means 'place'. *MECHICO.* Mexico is also believed to have another very similar etymology: *MESTLI*, which means 'moon'. *Mestli-Co:* 'at the centre of the moon'.

The maguey is a giant star-shaped agave. If you cut it open down the middle and scrape it, it drips like milk from a cow's udder, yielding one to two litres of "honey water" per day. When it is completely scraped, you can see a white moon in its centre.

Maguey grows on uncultivated hillsides, as its cultivation was abandoned five hundred years ago during colonisation. Today, "honey water" is used to make *pulque*, an alcoholic beverage that intoxicates entire villages.

I imagine that when the use of a sacred plant is distorted, as is the case with coca in Peru, its misuse leads to the degeneration of the population instead of bringing them strength, evolution and light. But maguey is a fantastic plant, capable of

halt the advance of the desert. It does not need to be watered. It simply captures the night-time condensation, the dew that moistens its leaves.

Little by little, thanks to the humidity it generates, grasses and other plants will grow around it. This creates an ecosystem that encourages the appearance of worms and snails, which in turn are eaten by lizards.

Ruben - I'll give you the Mayan calendar I use for sowing, so you can harvest every week.

Yvo - Isn't it also found in the codices?

R. - Yes. I rely on the codices. But when man learns to seek nature's approval, he no longer needs calendars: the cosmic clock is within him and he develops his intuition. Don Carmen talks to the earth and the plants. He is a person gifted with this sensitivity and intuition.

In Mexico, we have realised that the Western system is not suitable and that it is destroying the planet. We are therefore returning to our roots because they are healthy. We are going to readopt the traditional cycle, while taking account of new requirements.

Ruben - Don José Carmen wants to solve the problem of world hunger. That is his mission. If doors are closing in his face, it is because he is too impatient and humanity is not yet ready.

Ruben - Do you know why it is raining in Mexico at the moment? Don Carmen and I have created three forest parks. He was in charge of the project, in accordance with the messages he was receiving. He swung his pendulum over a map of Mexico and chose the sites. We then set to work. And it started to rain. Since last year, it has been raining and raining.

They came from Chapingo specifically to intimidate us. The rector of the university told me :

"We are going to get rid of Don José Carmen. The university is not interested in a project or agreement that lacks any scientific basis."

I replied :

"Sir, we are Mexican. How do you think the Aztecs made it rain?" The Aztecs used the same varieties as Don José Carmen, that is to say

10 or 12 species of trees. He simply plants them where he detects magnetic forces with his pendulum.

Before this last rector was appointed, two other rectors had given him their support.

Ruben - One fine day, Don José Carmen went to see the Secretary of State for Agriculture and said to him: "Sir, there is no water in the state of Morelia, is there?

- No, there isn't any; studies have established that.
- The studies were wrong. There is indeed some. And it's right there, in such-and-such a place! However, if you want to use it, you will have to give up growing barley and sugar cane. Apart from that, you can sow whatever you like. Orders from above! Barley is used to make beer and sugar cane is used to make sweets that poison the body...



Don José Carmen at the foot of a maguey

Y. - I hear that sugar cane also depletes the soil?

A. - It is indeed a monoculture that sucks all the richness out of the soil and destroys it. And it ruins the health of those who work it! Another more serious consequence of monoculture is rural exodus. Farmers end up abandoning the countryside for the city, where disadvantaged neighbourhoods are multiplying and crime and drug addiction are on the rise. Crop diversity encourages families to stay in the countryside. Ruben - Plants grow if we give them love. Planting a seed in the ground is like sending an unconscious prayer to all the elements involved in its development. Our food is made up of elements from the earth. The same is true for us.

When humans reach a level of consciousness sufficient to not ask the Earth for more than their sustenance, many problems will be solved.

Yvo - In Peru, the Earth is called Pachamama, or "Mother Earth". Before eating, the Indians always throw a little food on the ground.

on the ground and before drinking, they pour a little liquid on it because, according to them, the earth is also hungry and thirsty. For them, this gesture is natural.

A. - Before eating, I also say to the Earth:

"Give me a little energy, and I will give it back to you in the form of excrement." And that is how everything we eat evolves and transforms to enrich the Earth once again.

Nowadays, white people do not accept that human excrement is richer than sheep excrement. Yet humans can be the best fertiliser for the soil.

Ruben - Don Carmen is a psychic, a being with a very ancient soul who came to fulfil a mission. The last years of his life should enable him to accomplish it. We believe that humanity has its protectors, its guides who are sent to help us.

Yvo - When you say "an ancient soul", do you mean that he has been reincarnated?

R. - He is a very ancient soul in the sense that he has had many more reincarnations than most people.

Ruben - Don Carmen poses a problem for the government and all "orthodox" scientific institutions. The people in power are forced to talk about him, but they don't like him. Accepting Don José Carmen would force them to change their way of thinking, to rethink their studies and programmes, to question their budgets... Science has completely lost touch with the fundamental principles of the environment.

Yvo - How did these discs, which were cast at the foundry, work?

Ruben - They still work, and they're not just used to attract rain. Thanks to the energy they attract, the plant awakens, the earth awakens. It then communicates with the sea, and the sea sends it water... From then on, a single hectare, planted with 200 to 1,000 trees, is enough to replace an entire 1,000-hectare forest. These discs call upon cosmic energy. It is clear that Don Carmen knows how to use them. Just as the Nahua Indians and the Aztecs did before him with their pyramids.

Ruben - Don Carmen's method has a threefold

objective:

- √ to make it rain: "rain by inertia";
- √ improving agricultural yields for various crops such as beans, maize and *chicharo* (a variety of chickpea). In other words, sowing to obtain yields three to six times higher than normal;
- √ finding solutions where science has failed to treat, among other things, palm and tomato wilt disease and avocado tree diseases, which are highly virulent.

Don José Carmen, through the energy he captures and his

"exchanges" with plants, manages to find the solution.

Yvo - In Don José Carmen's house, there is a thorny plant that has lost all its thorns. What is it called?

Ruben - It's a mesquite.

Y. - José Carmen explained to me that the plant had

given up its thorns because it felt confident. It was no longer afraid...

R. - He spoke to it. It must feel good at his house. He also attracts beings who have achieved a certain level of spiritual fulfilment. His house is filled with peace and love. It is restful. Just look at how the plants there are always laden with flowers and fruit.

Ruben - José Carmen is already over 60 and starting to feel the weight of time. But that doesn't stop him from taking his van to Chiapas, then on to Tabasco, then Chihuahua...

Yvo - He doesn't look a day over 50, does he?

R. - I find it very difficult to keep up with him. I get terribly tired when he's as fresh as a daisy...

Yvo - Don José Carmen says he's authorised to publicly decipher the codices...

Ruben - That's what he's doing right now.

Ruben - On Earth today, the most primitive culture is that of the Americans, because they were the last to arrive.

Preludes

José Carmen's giant crops are no mere anecdote, because he has been renewing them every year for more than twenty years. So much so that the University of Agronomy in Chapingo has finally decided to collaborate with him.

I hope that this book will help Don José Carmen to continue his experiments and will be useful not only to farmers but also to anyone who wishes to undertake similar projects. I will therefore endeavour to describe as accurately as possible a method that could benefit the whole of humanity.

I will therefore present here the correspondence and information that followed the first official experiments.

HANDWRITTEN LETTER FROM JOSE CARMEN TO THE UACH

(Autonomous University of Chapingo)

Santiago Valley, November 1986

I, the undersigned José Carmen Garcia, undertake to sow different crops, starting with the coasts of Mexico and the centre of the country. The diversity of climates and altitudes, as well as the varying qualities and properties of your soil, will demonstrate that it is possible to cultivate anywhere and to learn how to use the fertilisers of the future, which should spread throughout the world.

The famine that is ravaging certain countries could spread to all if we do not react, or at least if those who still benefit from rainfall do not take action.

The planet has reached such a point of imbalance that we have already lost all control over it. This imbalance is due to excessive tree felling and atmospheric pollution, which have disrupted its harmonious functioning. Some people have acted out of ignorance, others out of greed. It is the latter who are responsible for the planet's

damaged, because they are not unaware of the reasons for the disaster. Without being in the least bit troubled, they do not seek to remedy it but, on the contrary, contribute to its worsening. They even claim to be environmentalists but "deprived of power and financial means". They do not realise that by destroying the Earth, they are destroying themselves.

This demonstration will allow them to see that there is still time to renounce their destructive behaviour.

José Carmen Garcia

LETTER FROM THE RECTOR OF THE UACH

Chapingo, Mexico, 10 March 1987, office 6020

To the university community:

In September 1986, the rectorate for which I am responsible initiated a technical collaboration project with Mr José Carmen Garcia Martînez, a native of Vallée de Santiago, Guanajuato, and a producer of giant vegetable plants, including cabbages.

As an institute of higher agricultural education, our university's mission is to learn about, encourage and disseminate technological innovations in the agricultural sector that have been tested outside the university campus. For this reason, we invited Don José Carmen Garcia to demonstrate the method he invented on the UACH grounds so that students and academic staff could observe its revolutionary nature.

In October and November 1986, the university authorities, accompanied by Don José Carmen, visited the crop areas of El

Gargaleote and the regional centre of Morelia, Michoacán State. They concluded that these two plots met the requirements for the planned demonstration and selected them, along with the experimental plot in Chapingo. Since then, the work has been coordinated by the university institute in agreement with the farmer. On the Chapingo experimental plot, one hectare of choice land was sown on 17 January 1987, and there are plans to sow four hectares of Var Rosa de Castille beans and four hectares of *chicharo* beans.

At the El Gargaleote production unit in Tamuin, 4 hectares of sorghum and 4 hectares of Var Rosa de Castille beans are to be sown. And at the regional centre in Morelia, 4 hectares of soya beans and 4 hectares of Var Rosa de Castille beans.

The aim is to double the average regional cereal yield by applying the method developed by Don José Carmen Garcia Martinez and, in the case of cabbages, to produce giant cabbages. Given the exceptional experience and knowledge that Don José Carmen has acquired over thirty-three years of farming,

I would like to extend a special invitation to the university community to participate in the activities planned for the spring-summer 1987 cycle.

Those interested may visit the university administration offices and speak to engineer Roberto Dominguez Castellanos, office 5799, where they will receive complete information on the progress of the work.

Y ours sincerely,

Dr Ignacio Mendez Ramirez, Rector of the UACH

CHAPINGO EXPERIMENT

This project involves fertilising an experimental plot (H-30) planted with two varieties of red beans, Phaseolus Vulgaris (Negro Jamapa and Flor de Mayo*), together with Zea maize, using copper, magnesium and zinc sulphates. To evaluate its yield and compare it to the average, two experimental plots at UACH were also seeded and treated with fertilisers commonly used in the region. *The local name has been retained.

Objectives

- √ To provide agronomy professionals in general, and UACH graduates in particular, with practical training on fertilisation and the cultivation of red beans in combination with maize.
- ✓ Demonstrate that the methods of Don José Carmen Garcia Martinez, who uses chemically pure magnesium sulphate (Mg), manganese

- (Mn), potassium (K) and calcium (Ca) on an experimental plot the fertilisers of the future
- following precise applications and dosages, are more effective than the common fertilisers that will be applied to two control plots.
- ✓ Demonstrate, by comparing different techniques, that his methodology and the chemicals he uses can double or triple production.

Background

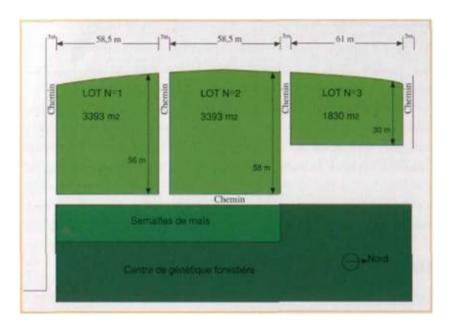
Mr José Carmen Garcia Martinez is a researcher renowned for his success in producing giant vegetables. He has also managed to grow crops on salt and sodium. land eroded bv participated in experiments supported government agencies such as the Secretariat for Urban and Ecological Development (SEDUE) and the National Institute for Agricultural Research (INIFAP). Since 1986, he has led various research projects with the UACH, with which he has signed two collaboration agreements.

Methodology

The combination of maize and red beans is a common practice among farmers in the Mesa Central. It consists of sowing maize and beans in the same furrow. This combination is profitable when considering the various factors of production: land, water, labour, etc.

These combinations are common in the Valley of Mexico and the southern part of the state of Tlaxcala, two areas located in the Caevamex region.

On the UACH experimental plot, lot J-98 in Lomas de San Juan Norte (covering an area of approximately 9,080 square metres), maize crops combined with red beans were fertilised with Mn, Mg, K and Ca sulphates using three different methods.



First, the 9,080 square metres were divided into three lots: No. 1: 3,393 square metres, No. 2: 3,393 square metres, No. 3: 1,830 square metres. In addition, two 5-metre-wide, 58-metre-long passages were created for agricultural machinery.

PARTIAL REPORT ON THE EXPERIMENT

Lot No. 1

(The work was carried out according to the methods used in the region and in accordance with the technical recommendations of the INIA).

Preparation of the land

Preliminary deep ploughing (40 to 50 centimetres). Then rough levelling of the land with a disc plough before a first pass with the harrow, then a second, until the clods of earth were completely broken up. Wheat was previously grown on this plot.

Varieties and sowing period

In order to reduce the risk of morning frosts, H-30 maize was sown on 6 June 1989, together with two varieties of red beans suited to the region (Negro Puebla and Flor de Mayo). The agricultural cycle corresponds to that of spring and summer. Dry sowing was carried out, followed immediately by watering.

Sowing method and seed density

For sowing, a mechanical seeder was used on dry ground, spacing the furrows 85 centimetres apart. The seeder deposited two maize seeds every 80 centimetres and six bean seeds sown in rows between the maize, in order to obtain 30,000 maize plants and 90,000 red bean plants per hectare. This sowing system is particularly recommended for the semi-climbing bean varieties in question.

Distribution of the two varieties of red beans in the experimental plot

From east to west, first 33 rows of Flor de Mayo red beans associated with H-30 maize. Sowing was carried out from north to south, with the rows and sowing oriented in the same direction. This was followed by 33 rows of Negro Puebla red beans associated with H-30 maize.

Fertilisation

For this sowing followed by watering, a 60-60-00 fertiliser was used during the second ploughing, with nitrogen and phosphate having

previously spread at the time of sowing.

To avoid contact with the seed, the fertiliser must be poured in small jets at the bottom of the furrow and covered with a light layer of soil.

On the same plot no. 1, the same doses and application methods were used for both varieties of red beans. The fertilisers, produced by Fertimex, are composed of urea and triple superphosphate.

Cultivation work

Weeds must be removed, at least during the first forty to sixty days after sprouting, depending on the variety's cycle. Weeding is done by hand, with a hoe or by machine. Weeding and earthing up are done as for maize sown alone, but care must be taken not to lift the soil too much when earthing up. It is also advisable to avoid using machinery so as not to cover the bean plants when they begin to develop their shoots.

Pests and diseases of red beans

The most common pests are: Epilachna varivestis (conchuela) and Apion godmani (picudo del ejote). To combat them, follow the same instructions as when vegetables are planted separately.

The diseases that most commonly affect red beans in this area are: anthracnose, *common blight* and *halo blight*. To prevent contamination or cure affected plants, use the chemicals recommended in each case by specialists.

Evaluation of results

In order to evaluate the average yield for each variety of beans associated with the same variety of maize on each plot, several 20-square-metre plots were harvested. The yields are as follows:

Flor de Mayo beans: 473.3 kgNegro Puebla beans: 727.5 kg

- maize: 1000 kg

The total harvest was 22,008 kg over an area of 3,393 square metres.

Lot No. 2

(The experiments were conducted according to the method of Don José Carmen.)

Preparation of the land

First, the soil is ploughed to a depth of 40 to 50 centimetres. Then a disc plough is used to level the surface layer. As the clods are large and compact, the rotary harrow must be passed over twice to properly level the soil for uniform sowing.

After the first pass with the harrow, and in order to disinfect the topsoil by fumigation, a chemical product based on calcium sulphate and potassium mixed with a common fungicide is spread dry. The quantity of product applied for this single batch is 8 kilograms. The harrow is then passed over the field a second time to mix the product and break up the soil. Wheat was previously grown on this land, depending on seasonal irrigation conditions.

Varieties and sowing times

H-30 maize was sown, together with the Negro Puebla and Flor de Mayo bean varieties, which are suited to the region. Sowing took place on 10

June 1989. The agricultural cycle corresponds to that of spring and summer, depending on rainfall.

After sprinkling water on the soil, we waited until it reached the right level of moisture to sow the furrows, which were made by a horse-drawn plough and spaced

85 centimetres apart. The two varieties of red beans were introduced earlier.

Sowing method and seed density

Two mules are used for sowing. On moist soil, at a depth of 15 centimetres, 5 or 6 maize seeds are placed in rows 1.20 metres apart in the furrows. Beans are sown along the furrow at a rate of 8 to 10 seeds per metre. This will yield approximately 90,000 maize plants and 100,000 red bean plants per hectare. This sowing method requires medium-sized varieties, such as those indicated above, and the land must be easily accessible for watering if rainfall is scarce.

Distribution of the two bean varieties in the experimental plot

In the east of the plot, 29 furrows are sown, in a

north-south orientation, Flor de Mayo beans combined with H-30 maize. In the west, on 29 other furrows, Negro Puebla beans are sown in the same way and in the same orientation, combined with the same type of maize.

Fertilisation

This plot does not receive any fertiliser at the time of sowing. Twelve to fifteen days after the first shoots emerge, the first leaf fertilisation is carried out using 3 kilograms of manganese sulphate per hectare. Two further fertilisation treatments will be carried out subsequently, according to Mr José Carmen's instructions.

Field work

Crops must be maintained for the first sixty days after sprouting. This maintenance is done manually with a hoe or by the farmer with his pack animals. Weeding and ridging will be carried out as for maize alone. Care must be taken not to raise the furrow too high when ridging so as not to cover the bean plants. Machinery should also be avoided when the beans are developing.

Pests

The most common pests for red beans are the *conchuela* and the *picitdo del ejote*. For maize, it is the cogoyero worm. To combat them, refer to the technical instructions provided by agricultural companies for maize and beans sown separately. Also be wary of the *palomita blanca* bean moth, which is occasionally found on the UACH experimental field. To remedy contamination, use commercially available products.

Diseases

The most significant diseases threatening beans in this area are anthracnose, *common blight* and *halo thrips*. In this case, it is recommended to use commercial products.

Evaluation of results

In order to make a correct comparison of the average yields for each bean variety associated with the same maize, several 20 m² plots will be harvested in each of the lots. The yield results are as follows:

- 1,226 kg of Flor de Mayo beans
- 1,466.5 kg of Negro Puebla beans
- 950 kg of maize

The total production of batch no. 2 is 35,433 kg over an area of 3,393 square metres.

Lot No. 3

(The experiments were conducted according to the INIA technical recommendations used in the region, with the addition of 12 tonnes of cattle manure)

Preparation of the land

Deep ploughing to a depth of 40 to 50 centimetres. Then, a disc plough is used to level the surface of the soil. Two passes with a harrow are required to break up clods of earth and ensure uniform sowing. Between the two passes with the harrow, 12 tonnes of manure (cattle excrement) are spread so that it is evenly distributed. This plot was previously used for wheat, watered only by rainwater.

Varieties and sowing times

For this late sowing, carried out in early June to reduce the risk of frost, H-30 maize is sown with two varieties of beans suited to the area: Negro Puebla and Flor de Mayo. Sowing date: 6 June 1989. Agricultural cycle: spring-summer. Dry sowing is followed by sprinkler irrigation.

Sowing method and seed density

Sowing is carried out using a seed drill and a mechanically driven vehicle. Seeds are sown dry, in furrows spaced 85 centimetres apart, at a rate of 2 maize seeds per plant every 90 centimetres and 6 bean seeds between the maize, to obtain approximately 30,000 maize plants and 90,000 bean plants per hectare. This sowing method is recommended for semiclimbing bean varieties, such as those used in this plot.

Distribution of the two bean varieties in the experimental plot

The furrows are dug from east to west and sown from north to south. Using these markers, sowing begins in the east on 21 furrows with

Flor de Mayo beans combined with H-30 maize. Next, the Negro Puebla variety is sown in 15 furrows combined with the same maize.

Fertilisation

For this sowing combined with artificial irrigation, the 60-60-00 fertilisation formula is used, applying all the nitrogen and phosphate from east to west at the time of sowing on the first 18 furrows sown with Elor de Mayo beans combined with H-30 maize.

The next three rows of these same beans planted alongside maize are not fertilised. The 15 rows of Negro Puebla beans combined with the same maize are not fertilised either. At the time of the second weeding, the first 18 rows of Flor de Mayo beans combined with H-30 maize are fertilised again with the same fertiliser as before (urea and triple superphosphate) and following the 60-60-00 formula.

Field work

Weeds must be removed for at least sixty days after the shoots appear, depending on the cycle of the variety used. Weeding is done by hand, with a hoe.

or by machine. Weeding and earthing up are carried out as for maize. Take care not to lift the soil too much when earthing up so as not to cover the bean plants. Avoid using machinery once the beans have developed their main stems.

Pests

The most common pests for red beans are the *conchuela* and the *picudo del ejote*, and for maize, the cogoyero worm. To combat them, follow the same instructions as for separate plants.

Diseases

The diseases that most affect beans in this area are anthracnose, *common blight* and *halo blight*. To control them, use commercially available recommended chemicals.

Evaluation of results

To make a correct comparison of the average yields for each variety of red bean associated with the same maize, harvest from each of the plots on several 20-square-metre plots. Results:

- 428.8 kg of Flor de Mayo beans
- 614 kg of Negro Puebla
- 400 kg of maize

The total production of this batch is 14,428 kg, covering an area of 1,830 square metres.

Results

José Carmen Garcia, who designed and supervised the fertilisation method for plot no. 2, tells me that we can expect at least double and at most triple the yield of maize or beans compared to plots 1 and 3.

We also also quantify the financial investment for each plot: the production cost for plot 2 is significantly lower than for plots 1 and 3. Adding up the production from the three plots, we obtain a total of 7,186.9 kg of grain from an area of 8,616 square metres.

Bibliography

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of the Valle de Mexico Experimental Agricultural Field, Chapingo, Mexico, 1981.)

All the techniques used for fertilising and cultivating plot no. 2, as well as the suggestion to sow beans alongside maize in different variations, were communicated by Don José Carmen Garcia Martînez himself. With my best regards.

Ignacio Nicolas Cerda Ruiz, Professor in the Department of Soils (UACH)

PROJECT FOR THE ECOLOGICAL REGENERATION OF ARID AND DESERT AREAS

Diagnosis

Arid and desert areas, which already make up the majority of Mexico, are likely to expand further each year. They currently cover 52% of the national territory and correspond to the states of Baja California, Baja California Sur, Coahuila, Zacatecas, Aguas Calientes, Durango, Nuevo Leon, Tamaulipa. They partially reach those of Guanajuato, Queretaro, San Luis Potosi and Hidalgo. These latter regions have a rainfall problem as they only receive around 800 millimetres of rain per year. What is more, this average is tending to decrease.

Objectives

This project aims to regenerate the country's arid and desert areas. In the near future, these unproductive lands will be integrated into new ecosystems and will contribute to economic growth by generating potential renewable natural resources.

More than 50% of desert and arid land is potentially cultivable, but water scarcity significantly reduces the development of flora and fauna.

By increasing the amount of water available and combining natural ecological regeneration with human intervention, it will be possible to expand the amount of land available for cultivation. Water is the only element capable of regenerating deserts and arid areas. Its absence compromises life. To provide a solution to the country's desertification, the immediate objective is to bring about

rain naturally over a radius of 30 kilometres, then cover the entire national territory and significantly increase the rainfall essential for true regeneration.

Strategy

This will be achieved by planting a variety of species in specific locations, following a precise orientation in order to attract rain-bearing clouds through 'inertia'.

Manuel Camacho Solis, Secretary of SEDUE



SitesSurface d'expérience

The three sites selected to conduct the rainfall experiment

AGREEMENT TO INDUCED RAIN

Increase in rainfall thanks to the combined influence of three forest plantations of various species

Main objective: To induce and increase rainfall in a natural way, mainly in arid and semi-arid areas, which would enable the agricultural sector to develop and improve.

Don José Carmen Garcia identified three areas that met the required criteria (altitude, latitude, gravity and magnetic orientation) to align these locations with the energies of the different forest species he had selected for each site.

Armed with the necessary information and authorisations, we were able to implement the second part of the project, which consisted of planting trees at each of the three previously identified sites. The planting holes had to be 50 centimetres deep and 30 centimetres in diameter. A topographical survey of each site will enable monitoring revolution of the project until the

final configuration of the plantation proposed by farmer José Carmen. For the final part of this project, the staff assigned to this university will be responsible for monitoring all the phenomena observed. A team will maintain and care for the three experimental sites in order to prevent drought or damage to the planted forest species and will periodically read the three rain gauges installed on each experimental plot.

Based on these readings, graphs of local precipitation will be produced, which should be higher than those reported by the national meteorological service.

Background

In 1986, at the Autonomous University of Chapingo, a technical collaboration agreement was established between Dr Ignacio Mendez Ramirez, rector of the UACH, and farmer José Carmen Garcia, a producer of giant vegetables.

To attract rain, he proposed, with the help of UACH staff, to reforest arid and semi-arid sites with different tree species . A this occasion, il a

selected three sites: the Vizcaino Desert in Baja California, and two plots located in the states of Zacatecas and Oaxaca.

The results of this experiment were communicated to us, accompanied by the following observations: "Plot located in the Vizcaino Desert where it had not rained for six years: once planting was completed according to José Carmen Garcia's instructions, it began to rain heavily.

Plot located in the state of Zacatecas: observation of the same phenomena. At this site, where it had not rained for three years, it began to rain heavily twenty-four hours after the last tree was planted. As for the plot located in the state of Oaxaca, which completed the circuit of the three areas, even before planting was completed, it began to rain heavily, as it had at the other two sites.

It should be noted that, at that time, Manuel Camacho Solis, head of the Secretariat for Urban and Ecological Development (SEDUE), and Onesimo Contreras, head of Lic., had committed to providing transport and supplies, to establishing the surveys and to

monitor the progress of each of the experimental sites. For reasons unknown to us, it was not possible to survey these sites at the end of the rainy season, as SEDUE failed to fulfil any of its commitments.

These comments constitute the only precedent for an experiment carried out to induce rainfall by planting different forest species in areas linked to specific cosmic influences.

Another important observation is that the rainfall measured at each site covered an area of 30 kilometres around the reforested areas, as indicated by José Carmen.

Vizcaino Desert: descriptive sheet

Background

The Vizcaino Desert in southern Baja California was chosen to carry out the project led by José Carmen Garcia of the Autonomous University of Chapingo. This project, which aims to make it rain, will be carried out simultaneously in the states of Oaxaca, San Luis Potosí and southern Baja California.

Location and characteristics of the Vizcaino Desert

Geographical coordinates: between 26° 49' and 28°

00' latitude and 103°00' and 114°35' longitude.

Area: 1,437,000 square kilometres.

Altitude: 200 metres.

Geomorphological feature: valley of recent alluvial deposits (Quaternary period, 1.1 billion years ago).

Prevailing winds: north-west.

Annual rainfall: 100 millimetres.

Average annual temperatures: between 2°C and 18°C.

Flora representative of the region: cacti: cactus (cierge), choya, sour agave, sweet agave, date palms.

Description of the experiment

Study and research of the area to be planted with trees. Marking at the ash of the points

cardinal points of the experiment layout, taking into account orientation and date. Planting of 350 trees: 300 casuarinas, 45 palm trees, 5 eucalyptus trees. (Use a plumb line to ensure the trees are planted vertically.) Spread fertiliser one metre away from each tree. Water every five days.

COMMUNICATION TO THE MEXICAN PEOPLE

Valle de Santiago, 10 November 1987

In the thirty-eight years that I have been conducting research in the field of agriculture, I have found a way to cause 'rain by inertia'. Just as you have seen, either in person or through photographs published in newspapers, that it is possible to grow giant plants, I will show you how to cause rain by inertia, provided that I am given the means to do so.

At the beginning of this year, the rector of the Autonomous University of Chapingo, Dr Ignacio Mendez Ramirez, funded a series of studies - plans, dowsing, radioactivity measurements, mathematical calculations, laboratory studies -

as well as a series of essential experiments. Experiments in which Mother Nature is directly called upon to indicate the orientation of the trees causing the "inertia" that attracts clouds.

I would like to inform you that last February, in accordance with nature, I carried out the first planting according to this approach, south of Baja California, in the Vizcaino Desert, in the Diaz Ordaz district of the municipality of Mulege. The inhabitants of this municipality cooperated extensively by providing tractors and labour to dig and load the trees and water onto their pickup trucks.

I travelled to southern Baja California with the support of the Autonomous University of Chapingo. The mayor of Mulege was very active and interested. As a result, the project was closely monitored. Unfortunately, one planting is not enough. At least three are needed to establish a complete circuit.

With the support of the University of Zacatecas, we carried out a second plantation in the commune of La Abundancia in the municipality of Coss. The inhabitants of the commune were very satisfied. They

willingly cooperated by transporting water from their village. The third plantation was carried out in the State of Oaxaca, in San Pablo Huitzo.

I was unable to return to the State of Zacatecas until May. When I did, I found the plantation abandoned. Of the 270 trees planted, 70 had died.

The lack of resources resulted in the abandonment of the project in terms of supervision, maintenance and monitoring of the operation.

In the municipality of Coss in the state of Zacatecas, where the trees were planted, the following results were nevertheless observed for the month of May: for the first time in twenty years, the rains arrived early. It began to rain at the end of March and, according to the farmers themselves, the countryside was as green as it usually is in July and August. I was also told that some maize plants reached 70 centimetres in height, suggesting that the rains were constant in a desert area bordering the state of Coahuila.

Finally, it should be noted that the Secretariat for Urban and Ecological Development, in its

The 1988 opening programme could include a new programme in its current plan entitled "Ecological regeneration by natural means". This programme would give new impetus to urban areas by replenishing groundwater reserves and would greatly benefit the country, as millions of hectares of desert areas would once again become cultivable.

Note: I enclose a copy of the letter sent to Manuel Camacho Solis, Secretary of SEDUE.

José Carmen Garcia, creator of giant vegetables.



Carrot obtained using Don José Carmen's methods

At the centre of energy

A huge cactus, a plant typical of the Mexican countryside, caught José Carmen's attention. "This is it!" he said. We had arrived at a somewhat desert-like place, located away from the cultivated land surrounding the Santiago Valley. There, a few metres from the cactus, he had buried a disc made of a strange metal alloy, which he used to capture the famous cosmic energy that he uses to perform many of his feats.

Yvo - Do you think this place benefits from the cosmic force you attract with the metal disc? (*see also page 258)

José Carmen - Let's say that, for the moment, human beings are allowed to use a dimension that rises up to the clouds. What lies beyond, in the other dimensions? We don't know, because we cannot penetrate them. These are still virgin territories. Today, the dimension attributed to man is almost exhausted. Our capacities as human beings do not

allow us to go higher, beyond this zone, or rather, to go in all directions, because in fact, in the universe there is no up or down. But by using this energy, we can be allowed to leave this zone.

The pyramids were built precisely for this purpose, to materialise what we are trying to do today with the antennas that are these discs. Unfortunately, not only was the construction of the pyramids never completed, but those that were finished were destroyed by the Spanish, whose warlords were ignorant.

We were about ten metres away from the cactus and José Carmen had picked up a dry stick. Using his pendulum, he tried to centre it directly above the central point of the disc he had buried. Finally, the pendulum stopped swinging and he took two steps back, satisfied. (You can see in the film that this stick is the only element that casts no shadow.)

Yvo - Would this be the centre of the antenna...?

José Carmen - This is where the centre of the new technological era of planet Earth would be. This disc, underground, weighs 96kg.

If this antenna were to be deflected even by a millimetre, it would not function. Its position must be absolutely precise, as was the case for the keystones of the pyramids. All pyramids have a few keystones, whose weight, dimensions and precise orientation enable them to communicate with the cosmos. The slightest deviation or error here would have repercussions there, thousands or millions of kilometres away.

- Y. How does this energy materialise so that it can be useful?
- J.C. Well, it is above all a way of nourishing the mind and body, giving them more strength, bringing them knowledge, helping them to accomplish what they could not do before and to obtain information from the Universe.
- Y. And what is this energy made of?
- J.C. No, no, I cannot address that question. It is energy that comes from space.
- Y. What role does this disc play?

- J. C. That of an accumulator that captures energy and concentrates it, because here we are at the centre of a magnetic zone. Thanks to this energy, I can show you on a map of Peru the regions where there is water. This energy therefore facilitates access to knowledge and allows us to take advantage of things that have always existed under the sun but that we do not know how to use or cannot see. Because the hardest thing to find is what we have always had right in front of our eyes. People need to realise that we have to produce more. It doesn't matter whether the plants are big or small. We just need enough of them!
- Y. So the fact that they are large or small doesn't seem to matter to you at all?
- J.C. Yes, it's important, because it increases the volume of production per hectare, but it's more complicated and difficult work. Just because someone can walk on a tightrope in a circus doesn't mean everyone else has to do the same. They'd kill themselves! I grew giant plants to attract attention!
- Y. To attract attention for what purpose?

J.C. - So that I could demonstrate the rest.

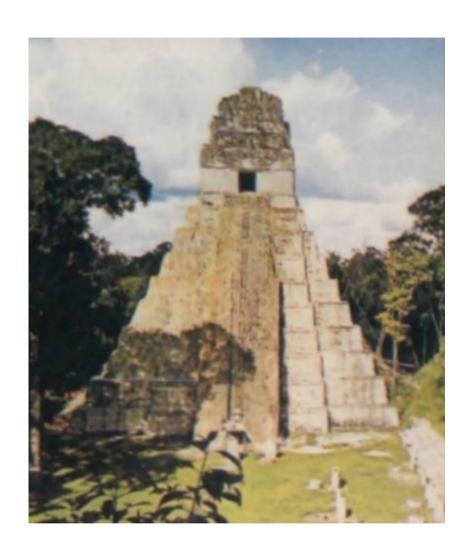
Y. - Meaning?

- J.C. For example, we wouldn't have been able to talk about this cosmic force as we do now, or about these discs that we buried, if it hadn't been for the giant vegetables. Who would have been interested in us? Who would have taken us seriously? No one!
- Y. And what is the most important thing that "remains" to be done?
- J.C. Everything is important! The fertilisers of the future will no longer contaminate the soil or water. That's important. Creating new plants, new food products that don't yet exist on Earth. Making it rain... For all this, we need energy from space. All plants on this planet are partly nourished by cosmic energy. We are cosmic! We must not be afraid of this. We are part of the cosmos, we are inside the cosmos!

If these volcanoes reproduced the shape of the Great Bear, there was a reason for it. Here, there is a

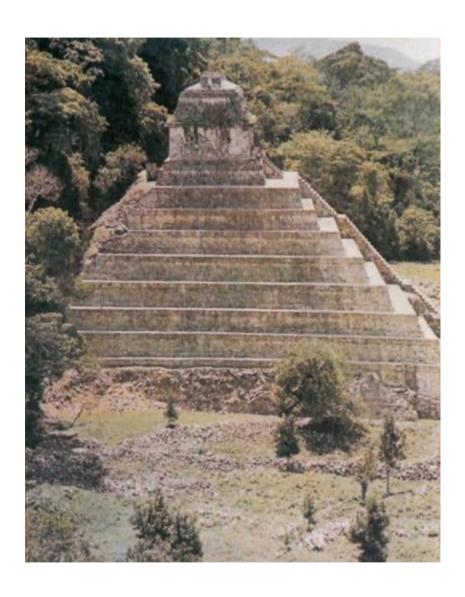
very strong magnetic zone, a zone in communication with cosmic space that allows this energy to enter. What I want is to teach how to produce more, whether the plants are giant or not.

Listen, when I went to compete with 153 engineers from the agricultural administrations in Mexico City, I beat them by 2,000% with my cabbages. I harvested 106 tonnes and 692 kg. They verified the results themselves. And they didn't even reach 6 tonnes! My cabbages made all the difference. Some of mine were this big (he opens his arms wide) and theirs were like little balls! We could do even better if there were a national experimental ranch. In Mexico, many people are skilled in agriculture. And there are millions of them around the world. The problem is that they often only know how to grow a limited number of plants, whereas I can handle more than 200. That's the difference!



Different types of pre-Columbian pyramids







Wall inscription located at the entrance to Al Berça (the swimming pool): "We invite you to discover the strange and hallucinatory valley of Santiago, 'The Land of the Seven Lights'. Its craters are cosmic radars and have an electromagnetic centre of great energy power. They rival the pyramids of Egypt."

Y. - Have you researched more than 200 cultures?

J.C. - Among which 100 or more are plants that do not yet exist on Earth. They do not exist because the crossbreeding

have not been carried out.

- Y. And what advantages would these plants of the future have?
- J.C. We would have greater and more varied production: trees that would produce fruit, perfumes and then wood...
- Y. What about the pests that plague agriculture and force us to use tonnes of pesticides?
- J.C. We must ensure that plants protect themselves, and trust nature once again. By inventing insecticides, fungicides, etc., humans have distanced themselves from nature and turned against it. We must take a step back and find ways to harmonise with nature, following its desires rather than our own. I am currently working on obtaining new varieties of tomatoes that are resistant to rough mosaic, fungi and other such diseases...
- Y. What is rough mosaic?
- J.C. It's a virus that causes the leaves to wilt, stunts the plant's growth

- of the plant and prevents it from growing. It's a global scourge. No solution has been found to date. I cross it with a plant that is resistant to this disease and all fungi...
- Y. And how do you know which plant to cross it with?
- J.C. I ask. It's a common mistake to believe that we know everything and that there's no need to ask.
- Y. But you're asking...
- J.C. ... Well, our mother, Nature, and even the Universe...
- Y. So, you think your mission is to reforest the planet?
- J.C. It's not "my" mission, it's simply ours, the mission of all human beings! Since we destroyed it, we must rebuild it. It's our obligation to all.
- Y. Yes, but not everyone can cause rain through inertia or produce

giant plants.

- J.C. But we can all plant trees...
- Y. Precisely, José Carmen, could you tell us how you chose the sites to plant trees to attract rain?
- J.C. Well, one of these places is here, another is in the state of Zacatecas, and the last one is in Oaxaca, forming a triangle. In fact, these sites were pointed out to us. By whom? How? It's a mystery! But they were indicated to us using a pendulum. The pendulum led me; it moved on its own. I looked and it stopped where the first point is. We noted it down and it continued to guide me and lead me to this tree, for example. I stopped where it asked me to. It was as if had whispered to me:

"This line is made up of such trees." And he indicated which trees to plant in each row.

- Y. Why were Baja California, Zacatecas and Oaxaca chosen?
- J.C. I don't know. I repeat, it is Mother Nature who marks the points on the map.

- Y. Since the project was successful, why didn't you continue?
- J.C. Because the rector left and we couldn't find funding to replant the missing trees. You understand that in the desert, if you stop watering the trees, they dry out. In Oaxaca, almost all of them dried out. They didn't water them. If you interrupt the cycle, it doesn't work anymore, no matter where you are.
- Y. And after all these experiences, are you optimistic or pessimistic?
- J.C. We've had some very good results. Look, on the day we planted the trees in Ojuelos, they were going to water them with a tanker truck seven kilometres from Ojuelos (Jalisco) and they realised that it had rained in that area and that there was water in the holes; so it wasn't necessary to water the small trees...

The only problem is that we have lost the support of the university research centre that undertook the moulding of the discs. When a rector comes in, another one leaves. The one who arrives undoes what the other has done, and so on.

- Y. So you remain optimistic despite everything?
- J.C. Yes, I remain optimistic, and I believe that I will continue to make some important demonstrations, with the support of the energy produced by these discs (see also page 258).
- Y. And what will these demonstrations consist of?
- J.C. For example, we will find water in deserts where no one has ever found it before. We can even find it in countries where there is a shortage.
- Y. Thanks to the pendulum?
- J.C. Thanks to the authorisation we have been granted. The pendulum is only the guide that will indicate:

"It's here."

- Y. If I bring you a map of Peru, could we detect where there is water in its deserts?
- J.C. Well, we just have to look at the map: I can tell you right away if there is any. Then,

we will have to have go there in order to more precisely define the areas...



When I went to compete with 153 engineers from the agricultural administrations in Mexico City, I beat them by

2,000% with cabbages. I harvested 106 tonnes and 692 kg. They checked it themselves. And they didn't even reach 6 tonnes!

The laboratory of chemist Sergio Trueba

When the first experiments using José Carmen's methods began in Chapingo, the Mexican academic community began to stir. One of the first to approach the experimental field was Sergio Trueba, a chemical engineer specialising in the manufacture of non-polluting domestic products, Nocom (which means "does not contaminate").

Sergio Trueba was known – as I learned much later – as the man who had developed the "surfactant", i.e. the formula that prolonged the effects of José Carmen's fertilisers on the leaves of young plants.

He had won everyone's trust, including José Carmen's, by joining the working group and offering the services of his laboratory and his team. One day, I decided to visit him with engineer Cerda. He showed us around his small but well-equipped laboratory, located near the university in the state of

Texcoco. The most interesting part of his work involved transforming the city's wastewater into fertiliser and treating human excrement in an environmentally friendly way.

Sergio Trueba - Can you believe it! We have abandoned the traditional know-how of our ancestors, to whom we owe Tenochtitlan, Mayan culture and Machu Picchu. The populations of the past solved their food problems and ensured their that subsistence using techniques were in harmony with nature. Since then, aggressive technology has arrived, along with the green revolution of Alton Boula, Nobel Prize winner! We began to produce hybrid seeds and gradually abandoned those that had been adapted to the country for thousands of years. Seven thousand years for corn, according to what they say here in Traditional techniques Oaxaca... were then abandoned, believed to be obsolete. The polyculture of maize, chillies and squash was replaced by monoculture. A hybrid monoculture, moreover, in other words, dependent. Here, the straw is Creole adaptation, as we say. It is resistant to drought, fungi and viruses, and it bears fruit.

Yvo - Does that mean that cultures that were already

adapted...

S.T. -... were abandoned? Yes. And it was this abandonment that was called the green revolution! People were told: "You are no longer useful, your maize is not profitable. We are going to create high-yield hybrids." But these hybrids consumed a lot of water. They withered if they didn't get enough, and without insecticides, they didn't survive either. It's like moving an Eskimo to the tropics. So production inevitably fell and the system collapsed. No one in Latin America has been able to solve this production problem. Nor in Africa, for that matter. That is why Nocom is concerned with reviving ancestral techniques and recovering "creole" seeds.

Don José Carmen worked with us for three years. As a chemical engineer, I taught him a little, but he taught me much more!

Sergio Trueba - We operate according to flawed systems. Instead of treating human excrement, we hide it and dispose of it through sewage systems. Here, we have a project for treating 'black water', i.e. water containing human excrement. We ferment it and then, using metamogenic bacteria, transform it into a highly nutritious substance.

, i.e. water containing excrement. We ferment it and then use metamogenic bacteria to transform it into a highly nutritious substance. Seven digesters of this type are going to be manufactured in Germany.

Yvo - So wastewater and black water will be recycled?

S.T. - Once all the pathogens have been removed, it will become an extremely nutritious substance and a very effective fertiliser. This is thanks to metamogenic bacteria, which I believe are the foundation of life. They destroy all pathogens and transform them into by-products such as vitamins, minerals, proteins and enzymes. One of these enzymes is somatotropin. It allows animals to grow twice as large in half the time! Another enzyme, called "usina", increases plant growth. These results are the fruit of extensive research.

Y. - They seem to be on the right track, which is good, because we no longer know where to store waste from large cities.

- S.T. We hide it, which causes bacterial pollution and gastroenteritis, and we release methane and sulphuric acid, two toxic gases, into the atmosphere... Here, everything is recycled and the converted water is even drinkable!
- Y. It's revolutionary! But there are so many preconceptions to overcome... And what are the production costs of these techniques?
- S.T. They cost half as much as polluting technologies, for twice the yield! ... "Nothing is created, nothing is lost, everything is recycled." Absolutely everything! Since Latin America realised the value of animal manure, it has been selling at a higher price. So what did we do? We put down a 40-centimetre layer of straw, 2 centimetres of manure and 2 centimetres of ruminant, the bacterial activator. We covered it all with plastic. Five weeks later, it was ready. The temperature, which can reach 80°C, sterilises the fertiliser obtained in this way. There are no unpleasant odours or nitrogen decomposing in the atmosphere.
- Y. One day in Valle de Santiago, I lifted the

lid of José Carmen's compost bin and could feel the heat coming off it.

S.T. - Here, the temperature reaches 80°C.

Y. - Is it a different system?

Nicolas Cerda - Yes, it is a biological process.

- S.T. Bacteria accelerate this process. José Carmen uses a traditional method of slow decomposition.
- Y. What is the role of pure chemical compounds such as manganese?
- S.T. They are complementary and have many advantages for agriculture: they transport and increase the nitrogen-fixing bacterial system, they transport nutrients in the soil to the plant roots, because they produce humic and fulvic acids. By fixing water through its own organic matter system, it improves soil quality because it prevents it from disintegrating and water from being lost through evaporation. Pure chemical compounds can also help improve

- saline soils. Here in the federal district, 6,000 tonnes of green organic matter are wasted every day!
- Y. All this could spell disaster for the multinationals that manufacture chemical fertilisers
- S.T. It already has. We are in direct competition.
- N.C. Multinational companies have started manufacturing organic products.
- S.T. They will have to offer the same kind of products as us. In this respect, we still have an advantage over the Americans and Europeans. But you'll see, they'll get there. However, we started our research in 1974 and we collaborate with agricultural engineers, biologists, chemists... with anyone who wants to invest in these sustainable development technologies. We are open to all kinds of ideas! Our imagination is our only limit. Needless to say, we are heavily criticised and often called crazy. That's why we make demonstrations are ready to on intensive farming

intensive farming practices of any agricultural enterprise. Our system is not utopian, it is viable.

- Y. When you talk about energy, what kind of energy are you referring to? Chemical energy or...
- S.T. It is energy accumulated in the environment, the Universe. Here, we capture solar energy, we manage to extract the energy received by plants. Because, in order to create a leaf, the plant has received energy. It has accumulated it in the form of chlorophyll, chloroplasts, etc. In order to grow, it needed energy and it stored it. What we do is extract this energy. We reuse it, in smaller quantities of course, since it has already been partially used! You yourself are a holder of energy; the universe is full of energy. If you get angry, it's negative energy; if you're happy, if you talk to plants, you capture positive energy.
- Y. So you believe that plants are intelligent beings capable of communicating?
- S.T. Yes, of course. They are capable of feeling. There are things there that we cannot yet

- understand. Let's are just beginning to just to suspect what nature really is.
- Y. Your approach and José Carmen's theories seem complementary to me. I was expecting to meet a...
- S.T. No, I'm a chemist who's become an agronomist... Look, here's the experimental biodigester. (*Trueba points to a cement tube about 8 metres wide and 2 metres long*.)
- N.C. We call it a biodigester because it's biological.
- S.T. We are going to biodigest, that is, transform human and animal excrement using metamogenic bacteria. In the total absence of oxygen, in an anaerobic state, the excrement begins to transform into vitamins, minerals and enzymes. This device is intended for students at UNAM (*National Autonomous University of Mexico*) and Chapingo. So that they can see what a biodigester is and understand how it is made... All you have to do is put the excrement in here. Fermentation begins forty-one days later.

late. It is not filled completely. Space is left for the methane it will produce to escape. This methane, together with other compounds, will be transformed into sulphuric acid and very useful nutrients. The gases are also recovered. This is where we put human and animal excrement from all sources: chickens, cows, sheep, pigs, etc.

/Bio-digester in Spanish: this is a bio-fermenter./

Climb up there... Look, this opening will be hermetically sealed so that the methane cannot escape. It comes out here and is collected in a tank filled with water, hermetically sealed and inverted. It's like placing one box inside another box.

We put lime in the water. When the gas, mixed with sulphuric acid, comes into contact with the lime water, it turns into calcium sulphide. Then, through oxidation, this calcium sulphate is transformed into plant food. This process requires the use of environmental resources. In the tropics, for example, as they did not have plastic to cover the compost, they used banana leaves. If banana leaves are not available,

cover them with soil. If 200 litres of excrement are put into the machine, 200 litres of transformed material comes out.

Y. - So sewage pipes could lead to biodigesters like these?

S.T. - Absolutely. Transporting wastewater to the sea through kilometres of pipes is madness that pollutes nature's most important food reserve. There are only two sources of oxygen: green plants on land and phytoplankton in the sea. Yet we attack the sea with toxic substances and plants insecticides, pesticides, herbicides. with fungicides, etc. This madness must stop, unless we want to see our civilisation disappear. The work we have developed here allows us to be selffinancing. This biodigester was designed for Xochicali by engineer Jesús Arias Chávez. Look how thick it is! It is a metal mesh cover, reinforced by two layers of chicken wire. The whole thing is assembled with cement and sand. From these elements, we have obtained a one million litre tank! It is capable of withstanding earthquakes. Thanks to its reinforcement and its round shape, a biodigester cannot break.

break.

Yvo - Do you think you also that possible possible to summon rain?

Sergio Trueba - Yes, of course.



- And what are the production costs of these techniques?
- -They are half the price of polluting technologies, and twice as efficient!

- Y. José Carmen, Nicolas Cerda and I are planning to go to the Peruvian desert to make it rain
- S.T. José Carmen is a master in this field. He connects different species of trees that form chains and have connection points between them. These connections then trigger a call and it starts to rain on the day the last tree is planted! This is what happened in the Vizcaino desert. It was around midday... It hadn't rained for twenty years. Well, what a downpour!

Nicolas Cerda - Did everyone come out to admire the spectacle? It was truly incredible!

S.T. - That's why we need to introduce them to this technique. The liberal technology that is being imposed on us is dehumanising. We cannot accept technology that excludes poor farmers.

Sergio Trueha - Look, this is the bacteria we use to activate the compost. (*Trueba shows some transparent plastic bags filled with a kind of sand.*)

Nicolas Cerda - Trueba manufactures this bacteria.

Yvo - It looks like sand.

N.C. - It's not sand. It's more like salt.

S.T. - It's the substrate for the bacteria. It's not toxic. You can touch it, don't be afraid... Bring me some water, Valentine, please. (*Trueba mixes the product with water in a container and drinks it.*)

Y. - What are these bacteria called?

S.T. - Nitrogen and Cellulase*. These are found in the stomachs of ruminants. We produce them in the laboratory. Look, here they are. The solution you see breaks everything down and also contains nutrients. The bacteria can be used diluted in water or directly in compost. It is a natural fungicide that contains various minerals. This energy-rich mixture is used to control fungi in both humans and plants. It is effective against all fungi. It is not like those patented fungicides, which are expensive and universally harmful.

We must develop products that do not harm the environment. This product has two benefits: it neutralises fungi while nourishing the plant.

*Nitrogen: an enzyme that fixes atmospheric nitrogen. Cellulase: an enzyme that promotes the conversion of cellulose into glucose.

Interview with engineer Nicolas Cerda, from the University of Chapingo

Throughout these pages, we have presented testimonials from various professionals who agree seriousness of Don José Carmen's revolutionary methods and the hope that their application to global agriculture could bring. We wanted to save for last the contribution of engineer Nicolas Cerda, director of the soil department at the University of Chapingo. Chapingo, Mexico's most important agricultural university, is located in Texcoco, near the capital. We know that in 1986, the rector was not immune to the media's regular reports on giant vegetables. An agreement was therefore reached with Don José Carmen to carry out his experiments within the scientific framework of the university.

Nicolas Cerda was officially tasked with monitoring José Carmen's work at the university. It was a revealing experience for him, but also the source of a series of conflicts due to the farmer's unorthodox methods. On the day we were scheduled to film our interview, he put me in a very awkward position by refusing to discuss on camera the paranormal phenomena he had witnessed and experienced during his many months of collaboration with José Carmen. He feared that his image as a serious academic professor would suffer.

The intervention of German Ignacio, our cameraman, was providential. He suggested splitting the interview into two parts: the normal and the paranormal. Nicolas Cerda agreed, but during the interview he abandoned this distinction and stuck to what had actually happened.

When filming was over, he breathed a sigh of relief. He had clearly just freed himself from something very important that he had to say, even though his testimony contradicted established scientific theories.

We subsequently became good friends. He is a cultured man with an irreproachable life, surrounded by a loving family and much appreciated by his students. He has participated in various conferences in Europe in his field of expertise; his contacts with José Carmen have profoundly

transformed his outlook.

Here is the full interview. No one can tell us about the incredible better than he can, in his clear and sober style.

Nicolas Cerda - I am a specialist in soil mapping and assessment. These two disciplines cover soil taxonomy and mapping as well as edaphology, soil and water management and conservation.

Yvo - How did you find out about the results achieved by José Carmen?

N.C. - Through the press, which one day announced, with photos to back it up, that farmer José Carmen Garcia Martinez was producing giant vegetables. I must say I didn't believe it. Given my technical training, I thought it was all just fairy tales. No one could produce a 45 kg cabbage as claimed in the newspapers! I told myself that this man was certainly a charlatan and at no point did I feel the need to verify this information.

It was here, at the Autonomous University of Chapingo,

My first contact with José Carmen took place in 1986. Dr Ignacio Mendez Ramirez was rector at the time, and I was working with him. It was he who met the farmer and offered him a scientific collaboration contract with the university. He was asked to carry out some experimental crops to prove that he could grow a 45 kg cabbage or triple the maize yield. Don Carmen agreed, and the rector asked me to assist him in carrying out this project. Once the authorisations had obtained. I contacted him. I went to his home in Valle de Santiago. When he saw me, he was suspicious. I think Don Carmen doesn't think much of agricultural engineers. He always says that they don't know anything and that you have to teach them everything...

Believing that I was dealing with someone who was, shall we say, not very adept at writing a project, I said to him, "Would you like us to define the scope of this experiment precisely so that we can measure the results obtained?

Right! If you want to compete with me as an engineer, he replied, then the one who produces the most wins. The plants will decide between us...

- You've misunderstood me, I said. I don't want to compete with you, that's not my speciality!
- In that case, he decided, the experiment must be conducted according to my instructions. Because otherwise, it won't work. My work is as precise as mathematics. You'll have to adapt to my approach.

I promised to follow his instructions.

The next day, he arrived with the typed project. He had written it himself and listed the plants he planned to use for the experiment. It was mainly corn combined with red beans. The goal was to triple the average production in the region.

On one of the plots, he also planned to grow only giant cabbages. "To produce these giant vegetables, I will choose the worst land," he said. He planned to plant red beans at three different sites. We first selected the experimental land at the University of Chapingo, where the altitude is 2,450 metres and the climate is temperate. He chose another

other plot in a tropical area: the El Gargaleote ranch in Huasteca, in the state of San Luis Potosí. There, at an altitude of 600 metres, we sowed 8 hectares of sorghum and 4 hectares of maize and red beans. The third plot was located near Morelia, in the state of Michoacán, on a property called La Carrela. There we planted 8 hectares of maize and red beans. When we went to Chapingo, José Carmen took a soil sample, which surprised me. Three days later, he came back and gave me the pH reading. pH is a technical term that refers to the degree of alkalinity or acidity of a soil. This was unexpected for me. Normally, a farmer does not know what pH is.

- Y. I know that he has only recently learned to read and write
- N.C. Yes. He still has some difficulty writing... So he gives me the pH of these three plots of land, which he estimates at 4, 5 and
- 3. I had data on these areas, and his measurements matched ours. Our pH levels range from 5 to 6, while his is one point lower. I was surprised by his knowledge.
- Y. How did he measure the pH?

N.C. - I asked him that question. And do you know what he replied? "*I ask the earth*."

I was in for more surprises. When he asked me to provide him with the chemical components of the fertilisers he wanted to use, he used some strange names: nitrate-nitric, nitrate-gel, gila sulphate, etc. searched everywhere, including specialised agrochemical dictionaries and the product directories used by multinational companies. Nowhere could I find such components. I also checked North American data, but still nothing! So I told him, "I can't find the products you're asking me for. As for seeds, I have everything: beans, peas, sorghum, maize. But we're missing the fertilisers."

Since I couldn't get them, I suggested that he give me the chemical formulas so that we could make them ourselves, using traditional methods, in our teaching and research laboratory, where we can manufacture chemical components. But he didn't want to give me give me the formula. I could sense that he was still wary and unwilling to reveal his secrets to me. "These are the fertilisers of the future! We don't know about them yet!" he said. I insisted: "We won't be able to carry out the experiment if you don't give me the formulas. The products you've given me don't exist. I've checked. I've even consulted doctors of biochemistry. They say you're pulling my leg." He started laughing and finally gave in:

"All right, I'll do it for you... For this formula, I need calcium, for this one chlorine, for that one manganese, and for this other one sulphur, etc." I told him that there were fertilisers that could give us all that: sulphates...

"Yes, that's what I want. Sulphates are the fertilisers of the future."

My astonishment grew. All the microelements used in modern agriculture are sulphate-based. But the problem was that José Carmen wanted them to be chemically pure. We know that using chemically pure components simply burns the crops... It was therefore risky to use these reagents, especially with the aim of tripling production!

SOWING

Nicolas Cerda - The day we started sowing maize together with red beans, many people came to visit us on the experimental plot. I prepared the ground as usual. I ploughed it and then levelled it with a heavy board to break up the clods of earth. Furrows, spaced 80 centimetres apart, were dug over an area of one and a half hectares. The sowing density used for the Rosa de Castilla variety was 60 to 70 kg per hectare.

Yvo - A variety bought at the market?

N.C. - Yes. It's a common variety in the northern part of the country, in Zacatecas. It's sown and distributed throughout the centre of the country. It's intended for consumption. We watered it and, ten days later, the moist soil was ready for sowing. That's when we had to face facts: the seed drill would be of no use to us... This was one of the key points of the experiment.

José Carmen asked me to sow at a depth of 20 centimetres. However, all the

instructions printed on the seed packets sold at the market, it is recommended to sow red beans at a depth of 7 or 8 centimetres. You can imagine the situation! The tractor driver said to me, "Listen, these beans will never grow! What's more, the seed drill is designed for a maximum depth of 9 centimetres!"

We decided to remove the wheel, which was no easy task. The seed drill would not go any lower. It was impossible to penetrate any deeper. It was a real problem! The seed drill was no longer of any use to us, and technology was not helping me...

I then had the idea of making tin funnels with a tube at the end and attaching them to the hoe. We placed a board on the seed drill from which a boy poured the seeds into the funnels. One funnel per seed drill. By doing this, we were able to sow corn and red beans mixed together 20 centimetres deep in the furrow.

When people saw us doing this, they couldn't believe their eyes. Some students and teachers were so incredulous that they even came to check the depth with a ruler. They asked, "What on earth are you doing?" And I replied

that it was an unusual experiment!

In short, we sowed 60 to 70 kg of red beans over one and a half hectares. The spacing for the maize was about one metre; one plant every metre.

The first important point is therefore the depth of sowing.

Next, Don Carmen recommended that I rake with branches rather than a mechanical metal rake. So we cut some tree branches and tied them to a pair of mules to rake gently. Closing the furrows protects the soil. This is how farmers used to prevent moisture loss through evaporation. However, this scattered 5 centimetres of dry soil.

Our effective sowing depth was therefore only 15 centimetres. Seven days later, the shoots began to appear.

The second important recommendation was to apply the chemical reagent on the twelfth day

after the emergence of maize and bean shoots. I prepared the required solution, chemically pure manganese sulphate, at a rate of one kilogram per hectare and a half, diluted in 200 litres of water, to which we added 300 millilitres of a surfactant manufactured by chemical engineer Trueba, who was enthusiastically following our experiments.

The function of the surfactant is to prolong the product's effectiveness on the surface of the leaves and thus make better use of the fertiliser.

Exactly twelve days after the shoots appeared, we began spraying the solution onto the leaves using a shoulder-mounted sprayer, similar to those we use to spread insecticide. A single farm worker was able to use up the 200 litres.

The last important recommendation was to irrigate the plant immediately after applying the manganese sulphate. We did this on the twelfth day, working through the night until everything was finished

I observed that over the 15 centimetres of

The roots of the red beans: the first five centimetres were dry after fifteen days. But the other ten were still moist, with the tip of the root enjoying optimal moisture levels. The first five centimetres had therefore already reached what we call PMP, which stands for "permanent wilting point". While the moisture level at 10 centimetres was satisfactory, at 15 centimetres it was above normal. Thanks to this technique, the entire root zone had plenty of room to explore and could spread out on either side for about 10 centimetres. The red bean roots thus began to develop rootlets at a depth of 15 centimetres, which were also able to grow in width.

It is easy to understand that such a process cannot be achieved by sowing at 7 centimetres, which is the case for current crops! In addition, thanks to this deep sowing alone, we were able to save on watering. The moisture lasted for a month! We simply removed the few weeds that appeared with a hoe.

I must make another remark in this which

concerns the fifth day after the application of the reagent. There was general yellowing. But four days later, this yellowing began to disappear and turn into a deep green... From then on, there was a huge, spectacular acceleration in crop growth. In fact, barely a month after watering and spraying the reagent, the red beans gradually covered all the furrows, and soon all that could be seen was a dark green carpet, a very dense forest that prevented any weeds from growing. Then flowering began.

Y. - Without any herbicide?

N.C. - None!

Y. - Nothing but a kilo of pure manganese sulphate?

N.C. - Yes. For one and a half hectares! I witnessed this phenomenon and couldn't believe my eyes. I came to see the crops every day. It was like a necessity.

Y. - Did you develop this surfactant for this specific purpose?

N.C. - Let me tell you the story... Among the visitors we received while we were working on this first experiment was, as you know, chemical engineer Sergio Trueba Castillo. He is self-employed, has set up his own company and is interested in agriculture. He had read articles about Don José Carmen. Having learned that experiments were being conducted, he managed to track us down and came to see us every day...

As I did not hide any information from him – I believe that is how research should be conducted – he said to me: "I am ready to help you. I can develop the fertiliser you want. In fact, I have developed a solution that I have tested at different temperatures and observed that it becomes surface-active at a certain temperature. If you like, we can try it here."



Spraying the surfactant on the leaves twelve days after emergence



Growth of maize plants associated with beans

I was very interested. He brought me a litre and we started the trials.

Y. - So this surfactant allows you to get the most out of the fertiliser?

N.C. - It increases its effectiveness. Firstly, because it causes greater osmotic activity in the plant's stomata. Secondly, because it increases their flexibility and helps to fix the product in place. Alternatively, sugar, soap or cactus sap can be used, which also give good results. I began taking samples to count the number of pods on the red bean plants, which I noticed were free of disease. I should point out that this variety of red bean is a medium-sized climbing species. This was obviously one of the reasons for growing maize: to provide support for the red beans. In full bloom, the beans had climbed all over the maize. You couldn't see 5 metres ahead. It was a veritable jungle!

Y. - How much does a normal plant yield?

N.C. - About thirty pods. On some plants, I counted up to 56. And in each

pod, which usually contains 5 seeds, there were up to 7. If you do a quick calculation, that's a fantastic yield!

Y. - And what was the average at harvest time?

N.C. - There were so many experiments to carry out! I had to liaise between the three sites, fulfil my duties at the university and teach classes... I didn't have enough time to quantify the exact production volume. Not to mention that a lot gets lost and stolen... But, in any case, we obtained 3 tonnes of maize and 3 tonnes of red beans from a single hectare, i.e. 6 tonnes.

Y. - And what is the usual average?

N.C. - The usual average for climbing red beans is 900 kg.

Y. - You mean production has tripled!

N.C. - Yes, tripled. And the average of 900 kilograms I'm talking about corresponds to climbing varieties . Our was semi-climbing

climbing... Don't tell me I'm making this up! I have photos of the whole experiment.

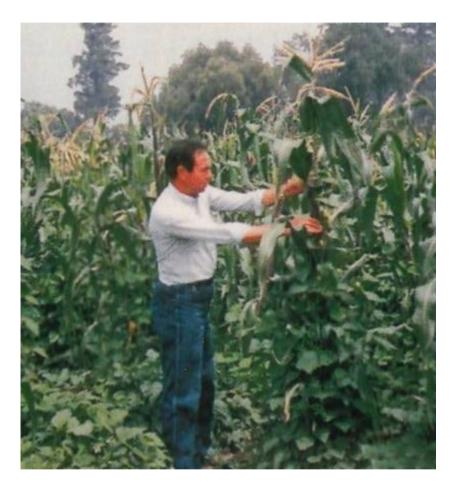
Y. - What were the results for the other crops?

N.C. - Before we get to the cauliflowers, let me first tell you about the experiment we conducted at the El Gargaleote ranch. There, we used the same variety of red beans combined with an early variety of maize. Due to a power cut, the pump couldn't draw water and we weren't able to water at the right time, i.e. just after applying the reagent. Instead of watering on the twelfth day, we only watered on the sixteenth. The plant developed normally, but it did not produce any flowers or fruit. All we got was straw! All because of a simple power cut. The process is mathematically precise!

In El Gargaleote, where the climate is warm, we sowed 8 hectares of sorghum for the second time. We had comparative data for these crops, as the technician in charge of the ranch had previously sown 50 other

hectares of sorghum. He used the standard fertilisers recommended here for the region and we used reagents. However, there were some variations, as we applied manganese and copper at a rate of 3 kg per hectare. We sprayed only once and did not use any herbicides.

Results: the technicians obtained an average of 4.5 tonnes per hectare on their land and we obtained 4.1 tonnes per hectare on ours, which is practically the same. But the difference in investment was enormous. This is a point I have not yet clarified: the purity of the elements in a chemical reagent is 99.5%. This is obviously very expensive. At that time, one kilogram cost us 70,000 pesos. A tonne of urea costs around 800,000 pesos. The price of nitrogen-phosphorus is more or less the same: 700,000 pesos. So if we want to apply the 70-40-00 formula to grow one hectare of maize and beans, we will have to spend nearly a million pesos on fertilisers, whereas a kilogram of chemically pure reagent that achieves the same results costs only 70,000 pesos. All things considered, it's not so bad. It's even quite economically viable. However, if the method spreads, how will farmers



This variety of red bean is a medium-sized climbing species. This was obviously one of the reasons for growing maize: to provide support for the red beans. In full bloom, the beans had climbed all over the maize. You couldn't see 5 metres ahead. It was like a real jungle!

How will the average person be able to obtain these chemically pure reagents? The product's success will drive up its price. It will no longer cost 70,000 pesos but a million pesos... This economic aspect is very important.

So, in the following experiments, we innovated. We used the same sulphate, but with a purity of 50%. We tripled the doses. We compensated for the impurity with a higher concentration and obtained the same result and a saving of 69,000 pesos! Don Carmen's satisfaction was evident. He understood that not only were we adapting his technology, but that its cost was becoming negligible. We manufactured the product ourselves in the Trueba laboratory. When it reached the required level of purity, we measured its pH and prepared the concentrations to obtain the formula.

Don Carmen still asks this chemist to prepare his solutions today. But not at the purest level, because that is very expensive.

In Morelia (Michoacan province), where we conducted the third experiment, we varied the reagents slightly by using manganese and zinc. This time, we were faced with

sodium-saline soil. This type of soil is unusable for agriculture. There are plants that can tolerate salinity levels above ten, but in most cases these are plants found in meadows. Basic plants, such as red beans, do not grow there. Not only was this soil saline, but it also contained sodium. Sodium is a component that defloculates the soil. Salt burns it and sodium defloculates it, making it dense - with reduced aeration - and impermeable.

We spread 36 kg of reagents prepared by us with a purity of 50% over the 8 hectares. It was very inexpensive: 36,000 pesos for 8 hectares. This allowed us to lower the pH, amend the soil and sow maize with red beans. We also obtained soybeans, a plant that had never been sown here before, as the area was not suitable for it. We tried the experiment on 12 furrows, and it grew.

Y. - How many varieties did you sow in this project?

N.C. - Basic vegetables and cereals: peas, red beans, squash, cabbage, maize and sorghum. And in Morelia (Michoacan), in saline-sodic soil

, we obtained a yield of 8 tonnes, or one tonne per hectare. A triumph for such soil, on which normally nothing is ever harvested!

The rector was so enthusiastic that he encouraged visits from various specialists: those responsible for irrigation, soils, plant science and agricultural machinery. He invited all the university authorities, directors and deputy directors, so that they could see how each experiment had been conducted

Of course, we made sure that it was Don Carmen who provided the explanations. I assisted him with his demonstrations. The rector proposed developing a fertilisation programme in areas with seasonal rainfall, in other words, those where it rains. Due to the diversity of climates, Mexican agriculture depends on rainfall for 70% to 80% of its needs.

The rector was thinking even further ahead. He planned to conduct this type of experiment in all regions of the country where crops depend on seasonal rainfall and to disseminate these new techniques.

However, the normal term of office for a rector is four years. These experiments were conducted

during the third year of his term. The following year, the experiments were spaced out and it was not possible to continue the research with the rector who succeeded him.

- Y. It seems that the Ministry of Agriculture initially thought that the black soil of Valle de Santiago had exceptional properties and was the cause of the phenomenon.
- N.C. Yes, it's a common belief that the soil is everything. But plant a seed, water it, and you'll see that it won't produce more than average. The fertility level of soil limits the amount of produce it yields. But when you use a reagent, it benefits the plant, and you can triple or quadruple the yield. The phenomenon does not come from the soil, but from the plant! With the reagent, we cause a transfer of energy and thus manipulate cosmic energy. How? Through the Krebs cycle.

Y. - What is that?

N.C. - It's the respiratory cycle. Plants need energy to breathe. They can obtain this energy from nitrogen and oxygen.

and hydrogen. But a whole series of essential components are also involved. One of them is manganese! So, when I spray a concentration of manganese on a plant, I cause its cycle to accelerate.

Thanks to this accelerator, the plant will consume nitrogen, it will extract it. It then increases its area of exploration. It makes desperate efforts to achieve this and eventually succeeds. With good humidity and temperature, if I cause its cycle to accelerate, it attracts more cosmic energy... We still understand very little about the universe. But it is a fact that manganese contains a nutrient that causes the plant to attract cosmic energy.

When you are the victim of a serious accident, you can see your whole life flash before your eyes in an instant. Your mental activity speeds up and works in a fantastic way. What is actually happening? You are using mental energy, which is nothing more than biochemical energy. And this generates proteins, carbohydrates, vitamins... That is what energy is. Ultimately, we always come back to nitrogen, oxygen,

carbon, hydrogen...

- Y. Why can't everyone do it?
- N.C. Quite simply because people are not mentally educated. It requires teaching, learning.
- Y. What dispositions must one have to be able to receive this energy?
- N.C. Don Carmen often says that the masters of the future are being born. He is talking about people with paranormal gifts, those who, for example, have the ability to talk to animals, plants, the environment...
- Y. He believes that everything is alive, that everything is intelligent.
- N.C. Well, when these people who are able to communicate with the environment come forward, it will be their responsibility to educate future generations. Current education no longer ensures the evolution of the human mind. The new masters have the task of teaching us that we must integrate ourselves into the cosmos.

To communicate with other dimensions, we must eliminate arrogance, envy, jealousy, vice... because these behaviours prevent us from accessing this knowledge.

Right, I think we can now get back to the giant cauliflowers. We carried out experiments on them in the upper part of the Chapingo experimental field, which borders San Diego Park, the place chosen by José Carmen to sow a hectare. The soil is sandy to a depth of twenty centimetres. I asked him, "What are we doing here? Are we adding sulphate, Don Carmen?

- No, nothing like that here," replied Don Carmen.

Here, we will proceed as usual. We will use the 60-40-07 fertiliser formula. Get this fertiliser. You will simply add a little manure to it.

- How much?
- Just a sprinkling.

In fact, that sprinkling required seven lorries full to the brim with manure, enough to cover four hectares. I said to him, "Look, this is all I could get hold of, what should I do?

- It'll be enough."

Then we went to buy a variety of cabbage called Ciclopardia.

"I'm the only one who can do this sowing!" he told me. So we got everything ready for him. As soon as he arrived, we gave him the box containing the seeds. After sowing 200 metres of the first furrow, he changed his mind: "Actually, it would be better if you helped me... I'll take a look." " And out came his pendulum: "Only two other people can sow with me," he finally said, pointing to us, engineer Alberto Jimenez and myself.

So the three of us worked together. We placed 3 to 5 seeds in holes 4 centimetres deep, then covered them lightly with soil, leaving a space of one metre between each one. We used our stride length as a measure. José Carmen

told us, "They're going to grow so much that they need all that space."

After a week, nothing. After two weeks, we began to see shoots.

"We're going to do a follow-up experiment here," announced José Carmen. "Find me 200 people at the university. Ask the professors, the students, the secretaries, anyone who wants to... Next to this hectare, we're going to set up other test hectares. We'll dig up plants from this first batch and give them to those who wish to participate in the experiment. Each person will be assigned a furrow, and we'll see how the plants react to each individual. It's a way of measuring people's energy!"

I thought I was dealing with a madman, but the information was nevertheless passed on and soon people arrived. Eighty people had come. Among them was Rector Ignacio Mendez Ramirez. When the plants were ready to be transplanted, only Alberto Jimenez, Don Carmen and I were allowed to work on the first experimental batch. We watered the ground to soften it a little. And, as we went along,

As we dug them up, we gave the seedlings to the participants, assigning them a furrow. After noting their names and furrow numbers, we asked them to plant their cabbages using whatever method they preferred.

Eighty furrows were prepared in this way. The experiment could begin.

It was extraordinary! For some people, only three cabbages had grown along the hundred metres of furrows. Three cabbages! For others, cabbages had only sprouted in half of the furrows. On the other hand, some had managed to grow them along the entire length of their furrows, sometimes even obtaining dense, tightly packed rows of cabbages... This showed how some people had an affinity for plants and others did not.

A few had indeed obtained oversized cabbages, others a normal yield with the occasional giant cabbage. It was wonderful to see how the rector's furrow was the most successful. He had not obtained giant cabbages. But, on the other hand, his yield exceeded that of all the others. As an anecdote, it's worth noting that one person carried the plants to the rector while another did the

holes! As for Don Carmen's field, it yielded a large quantity of giant cabbages... During this period, a hailstorm broke out. But these weren't normal hailstones, they were enormous! We were in the field when the shower started and we had to take refuge in the car. And the hail only fell in that area. It destroyed the cabbage leaves, but... afterwards, new ones grew back.

Y. - So the aim of this experiment was to highlight the importance of the human factor?

N.C. - Yes, the human factor alone, as I believe the result is linked to the energy that each person possesses.

Y. - Did you plant too?

N.C. - Yes, I planted one row and Jimenez planted another. Ten *per cent* of my row was unproductive, compared to seven *per cent* for Jimenez. I was less successful than him, but I had ten giant cabbages and he only had six. Strange, isn't it? We couldn't find any explanation for it.

THE DISCS

Nicolas Cerda - One of the most astonishing experiences was capturing cosmo-telluric energy currents.

Yvo - The discs...?

N.C. - Exactly. Don Carmen explained how they worked to me, and I then spoke to the rector about it. It was during the last year of his term of office. I said to him, "The experiment involves receiving a certain amount of cosmo-telluric energy. To do this, we need to develop a simple but well-structured project. If you allow us, we can get started."

Given the success of the initial experiments, he agreed. I immediately went to a foundry and asked a metallurgical engineer to develop a pair of discs made of different alloys. The idea was to create a kind of accumulator. We logically designed a "negative" disc and a "positive" disc, then went to identify the locations that would be the discharge points for cosmic energy.

Y. - How did you discover these points?

N.C. - Well... through paranormal methods... José Carmen detected them, also using cosmic energy.

Y - Did the discs tell him the locations?

N.C. - Yes, they also told him the day when the discs were to be placed. Once on site, with the discs, he had to wait for the right moment to locate the points using a pendulum made of the same alloy as one of the discs. Incidentally, this alloy was not easy to produce. The foundryman told me outright that it was impossible to make, that the alloy of lead and bronze in particular was useless, that the metal obtained was homogeneous, that it veined, that it scratched, but that it did not mix! So I said to him: Add some clay or sand... In short, figure it out, but find a way to mix it. And also, save me a ball of because I want to make a lead weight from the same material, melted at the same temperature, on the same day.

Y. - Is that what he uses as a clock?

N.C. - Yes, the foundryman made it. This

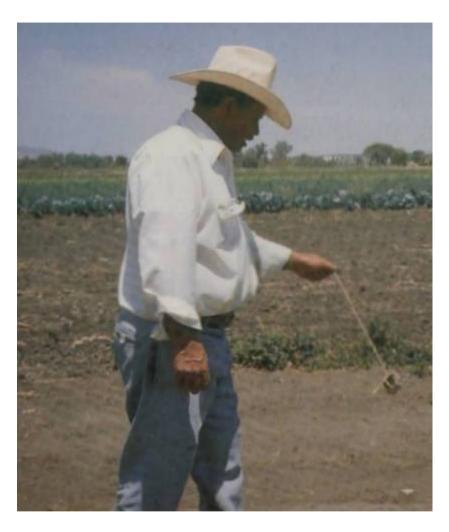
lead is unique. It was from there that we were able to start attracting rain.

Y. - Rain by inertia...

N.C. - Yes. These are somewhat bizarre experiments, known as "unconventional" because they cannot be scientifically verified. The largest disc weighed 176 kg. When we took it off the vehicle, it rolled and sank three-quarters of the way into a ditch with clay soil. We had to put it in place at noon and we had twenty minutes left.

If we failed, we would have had to wait another year. So we placed a steel bar in the hole that pierced its centre, and we pulled, him on one side and me on the other. But our strength was not enough. Not only did the disc not come up, but we were sinking. We were desperate. I then heard myself speak like an automaton: "Find me a piece of wire at least 90 centimetres long and bring it to me."

He found it right away, as if he already knew where it was.



These are somewhat bizarre experiences, known as "unconventional".



Before the operation, the sky was cloudy and the wind was blowing very strongly.

I put it through the central hole to block the steel bar and began to lift the disc with surprising ease (the law of leverage...). Don Carmen watched, stunned. I dragged the disc into the ditch and pulled it out on my own. I lifted it and placed it at the bottom of the hole we had prepared. The fragility of my back normally prevents me from lifting heavy weights. But at that moment, I felt no pain. I didn't even realise how heavy it was. I felt like I was fifteen years old. What's more

What's more, we hadn't had breakfast or drunk any water. We had been walking in the mountains for three days, using a pendulum to find the spots where the discs were to be buried. This is a paranormal phenomenon. He felt the same way.

The night before, at midnight, when we placed the first disc in the spot identified as the negative point, another phenomenon occurred. At this negative point, we buried the smallest disc, which weighed over 70 kilos...

Y. - The one next to the cactus...

N.C. - Yes. I had to move in a specific direction, always with my back to the west, throughout the entire operation.

Y. - Why?

N.C. - Because I could have been injured by cosmic energy.

Y. - But how did you know that?

N.C. - From the pendulum. Before the operation, José

Carmen had warned me. Not only did I have to turn my back to the west, but I also had to stay at least 30 metres away from the site until he had established the energy flow. And even once it was established, I still had to protect myself because I did not have the same energy assimilation levels as him. Before the operation, the sky was cloudy the wind was blowing very strongly. Afterwards. everything calmed down suddenly, as I looked up at the sky, I had a strange feeling. The Milky Way seemed to be about 500 metres above our heads. An optical illusion, perhaps, but that's how I saw it, and I said to Don José, "Look up there! Can you see...

- Yes. In this kind experiences, these phenomena are quite common.
- What is it?
- We are simply being observed...
- Are they flying saucers?
- *No, they are extraterrestrials.*" That's what he said.

As the paranormal phenomena continued to occur, I was caught in a dilemma: should I consider science to be an illusion and what I was experiencing

as reality, or was it the opposite?

If we take this further, the energy captured can be used to grow giant plants. It can also be used to heal human beings or to treat plant diseases. This energy is a source that can be used in any way we want. It is a kind of accumulator that attracts and concentrates this cosmic energy and, thanks to the pendulum, we know how to use it (Don José Carmen currently uses this pendulum in almost all his activities).

THE DISCHARGE OF LIGHTNING

Nicolas Cerda - One day, while I was driving my car, I suddenly felt a shock. It was as if I had been struck by lightning. My body remained frozen by the impact, in the position it was in at the moment of the shock. Nevertheless, I remained conscious and lucid, and I said to myself: "If the lightning didn't kill me, I'm still going to die because I won't be able to negotiate this bend, I'm going to crash into the barrier opposite..." But nothing happened! When I reached the corner of the street, my body reacted and the

vehicle continued on its way. I stopped, got out and asked the people with me, "Did you see anything? Did you feel anything?" For them, nothing unusual had happened. My thoughts were racing.

What had happened to me? Why had I felt that shock and why had my body frozen? How had I come back to life? I have no explanation, but I haven't forgotten! Many strange things happened to me after the experience with the discs. Afterwards, Don José Carmen allowed me to use the pendulum. We used it in particular to detect underground watercourses. On site, but also from a distance. All you have to do is give Don José a map. He lets himself go and tells you without fail where to find the water.

WATER DETECTION

Nicolas Cerda - We had a series of strange experiences. For example, we went to locate an aquifer in Michoacan. On the map of the city of Morelia, which lacks drinking water, we detected an underground aquifer capable of providing 23

cubic metres of water per second. With the help of draughtsmen and surveyors, I prepared a short report explaining the origin of this water, why it was there and how it had been discovered. I gave this report to the rector, who forwarded it to the governor of the state of Michoacan.

I went myself to submit a copy to the Secretariat for Agriculture and Water Resources. They called me crazy. Yet all we were asking for was an exploration of the indicated location to certify the existence of a spring with a flow rate of 2 cubic metres per second! And the only thing we wanted was to install a machine that would drill through 46 metres of rock. We were given a categorical refusal. The necessary equipment existed, but there was no question of using it for this operation! An unusual project is likely to be rejected by the government authorities. They don't even bother to study it...

RAIN BY INERTIA

Yvo - And inertial rain, did you manage to make it happen?

Nicolas Cerda - Later, we conducted an experiment to trigger it. We chose three sites for this: the Vizcaino region in northern Baja California - a desert area where it hardly ever rains - another semi-arid area in Ojuelos, in the state of Jalisco, and a third on the Mexican high plateau of Tlaxcala, a highly eroded plateau with little rainfall. We then identified the species to be planted. This is how Don José Carmen proceeds: in the field, he lets himself be guided by the pendulum and traces a closed polygon. The surveyor follows him. Once the site has been surveyed, he tells us the number and type of trees to be planted along each side of the polygon, as well as the space required between the plants.

Y. - What trees did you plant?

N.C. - Species native to the region. In Baja California, mainly pitallos* and organos*. In Ojuelos, eucalyptus, palm trees and laurels. Here in Tlaxcala, we planted a

variety called colorin*. (*Local name)

Don Carmen's method is inspired by the techniques used by ancient indigenous tribes to attract rain, techniques which he has researched.

Y. - Was this experiment also sponsored by the university?

N. C. - Yes, during the rector's last year in office. In Tlaxcala, Don Carmen told us: "It's going to rain abnormally. There will be heavy rainfall within a 40-kilometre radius of the site. Beyond that, it will be less, but still above the regional average." I suggested that we check using rain gauges. For our measurements, we needed three every ten kilometres throughout the experimental area. Rain gauges are expensive, so we decided to make them ourselves.

We purchased PVC pipes to which we attached wooden covers covered with a piece of inner tube. Then we marked them by hand. What a saving! Just as we were ready to install them, the

rector left the university. His successor did not want to fund the project, so we were unable to take the readings. It was that year, in 1990, that we witnessed some extremely rare weather phenomena. For example, Hurricane Gilbert. which hit the south-east coast of Mexico. Here, it rained all year long. The same thing happened in Vizcaino and Jalisco... Nature seemed to be running wild... Unfortunately, in order to evaluate and establish accurate data for a project of this magnitude, you need people on the ground. This involves accommodation costs. vehicle. a monitoring all the sites, sampling precipitation, etc. All of this is expensive.

However, at that time, the country had just gone through a crisis and there were other problems to deal with.

So far, I have described a series of technical experiments. Although they were not statistically monitored, they could be quantified based on the yields obtained.

These experiments drew on chemistry, mathematics and traditional farming techniques. Sowing seeds 20 centimetres deep is what our ancestors used to do.

Some indigenous people even sow corn at a depth of 40 centimetres. I have seen it with my own eyes. And this corn grows so vigorously that you would think it had been properly irrigated. All these technical experiments – as I call them – are available to everyone. We have the evidence, the data, and the authorities at this university have been able to witness it. What is less well known are the astonishing experiments of the second stage. I have not had the means to verify them. It was not Don Carmen who told me about them; I experienced them personally. All this may seem incredible to some. The only way to stop doubting would be for others to engage in the same type of experiences.

- Y. Ultimately, Professor, do you believe that unknown energies are involved in these cultures or in the detection of water or the translation of the codices?
- N.C. I think so. Because, thanks to the teaching I received from Don Carmen, I felt these energies within me. I believe it was my duty to bear witness to these events and to present the objectives that were being pursued . The pursuit of this kind

experiments may still meet with little response. However, I believe that it is thanks to this type of research that science has progressed. For me, what characterises the scientific spirit is rigour. But I also consider that anything that brings knowledge and provides tangible results is part of science. We must abandon the educational path that is being imposed on us in our industrialised countries. It is extraordinary to see how much wisdom and knowledge our ancestors possessed. They knew how to manipulate these levels of energy. That is why Don Carmen began to study the codices and translate them using energy.

- Y. I believe you then asked José Carmen to interpret the codices?
- N.C. Yes, and that is why we now have his interpretation of one of the codices on agriculture at the University of Chapingo.

TRANCE

Yvo - I hear that Don José Carmen communicates with certain spirits?

Nicolas Cerda - Yes... We visited a few archaeological sites. For example, I accompanied him to Veracruz in Chiapas and here in the State of Mexico. And we found ourselves writing down what the spirits of the tribes we visited dictated to us!

Y - In a trance?

N.C. - Yes.

Y. - How did you enter a trance?

N.C. - We arrive at the site. Don José Carmen begins to use his pendulum. When everything is ready, he acts as a medium. Or perhaps we both act as mediums. But he speaks and I write. Very quickly, within ten minutes, I find myself asleep, which doesn't stop me from writing. And during my sleep, I see...

"sleep" the site as it once was. I experienced this phenomenon in Veracruz.

Y. - Doesn't this initiation conflict

with your academic work?

N.C. - We are sometimes confronted with paranormal phenomena that run counter to scientific practices and for which there is no explanation, or at least, we have not found one. So, we are led to wonder who is really right?

Epilogue

The film about Don José Carmen Garcia Martinez, this humble Mexican farmer, is now complete. Like the book, it is entitled *The Man Who Talks to Plants and* aims to challenge us about what we are capable of doing and what we must do if we still want to enjoy our welcoming planet. Because ecology is not just a matter for environmentalists! It concerns us all.

Since José Carmen is willing not only to talk to us about these techniques, but above all to teach them to us, this report becomes a source of tremendous hope in the fight against world hunger. By increasing production while reducing costs, farmers use only one kilogram of his formula to fertilise one and a half hectares, whereas modern agriculture uses more than 500 kilograms per hectare. If we remember that current fertilisers and pesticides contaminate the soil en y leaving des traces of arsenic, of

cadmium and lead, and that the natural defences of plants are diminishing - a decrease that requires the use of ever more chemicals - the different method that this farmer has decided to reveal to the general public for the first time fills us with enthusiasm.

Our farmer's astonishing results are proof of the effectiveness of his techniques. However, we must not forget – as Don José Carmen tirelessly repeats – that in order to take advantage of these discoveries, we must first and foremost completely re-evaluate our values and change our mindsets. It is as if only those capable of this real inner evolution could fully benefit from all this knowledge.

What if we were on the verge of a fundamental discovery for science and human consciousness? Because the energies that Don José Carmen manipulates and which influence the vitality and size of his vegetables are not solely due to the use of one kilogram of fertiliser per hectare and a few other technical details. Other factors, difficult for our scientifically rational minds to accept, come into play and are surely essential...

In his mad pretension to dominate nature, man has only destroyed it. How could it be otherwise when our economic systems know no other rules than their own growth and their obvious goal is to increase production ever more and push us to consume it?

Trapped in this vicious circle, we are squandering the resources of planet Earth at a dizzying pace and rendering it uninhabitable. In this alarming context, we hope that the peoples of emerging countries, who still look to the industrialised West as a model for development, will take care not to repeat the mistakes that robot technology has led us to make. A technology that has left millions of people unemployed and homeless and has led to soulless development, becoming public enemy number one of man, air, water and the Earth...

Perhaps this Mexican farmer, with his giant crops and inertial rain, brings us a different message, one that could fall from the sky like water full of hope...

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L'HOMME QUI PARLE AVEC LES PLANTES

Des choux de 45 kilos, des pieds de maïs de 5 mètres de haut, des feuilles de blettes d'un mètre et demi, 150 tonnes d'oignons par hectare, lorsque la récolte moyenne est de 16 tonnes à l'hectare, etc.

L'homme qui peut accomplir ces prodiges par des techniques respectueuses de l'environnement s'appelle don José Carmen. D'où cet agriculteur mexicain tire t'il ses connaissances? Comment parvenir à de tels résultats?

Chimistes, agronomes et ingénieurs ont suivi le travail de cet homme hors du commun. Ce livre expose leurs observations et détaille les expériences répétées avec succès dans le cadre scientifique de la plus importante université d'agronomie du Mexique.

Pour la première fois, don José Carmen a accepté de révéler ses « secrets » pour faire pousser des légumes géants et obtenir des rendements exceptionnels.

Quelques-uns des savoir-faire présentés dans ce livre :

- Cultiver sans pesticide et doubler la production agricole
 - Utiliser 700 g/ha de fertilisants au lieu des 500 kg/ha habituellement appliqués
- Créer des plantes non transgéniques et résistantes aux maladies
- Cultiver sur terres salées
- Et étonnement... faire pleuvoir

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